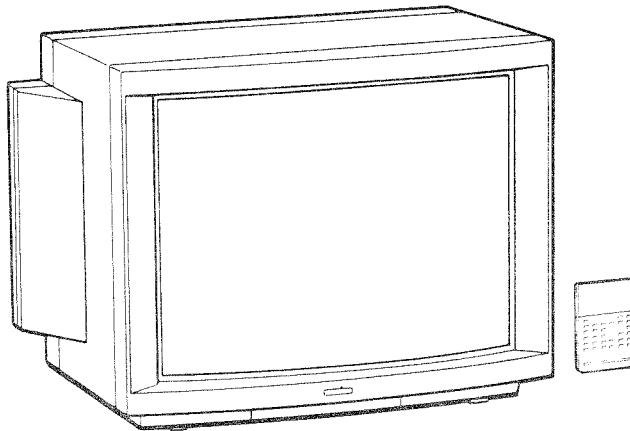


**KV-27SXR10**  
RM-755

7393

# SERVICE MANUAL



**P-2B CHASSIS**

Note: The service manual for RM-755 has been issued separately.

## MODELS OF THE SAME SERIES

KV-27SXR10	
KV-32SXR10	

## SPECIFICATIONS

Television system	American TV standard	Output	MONITOR OUTPUT (phono jacks)
Channel coverage	VHF: 2-13 UHF: 14-69 Cable TV: 1-125		Video: 1 Vp-p, 75-ohms unbalanced, sync negative Audio: 500 mVrms (100% modulation) Impedance: 10 kilohms
Picture tube	Microblack Trinitron tube <b>27-inch picture measured diagonally</b> 28-inch picture tube measured diagonally		AUDIO OUTPUT (VARIABLE) (phono jacks) More than 408 mVrms at the maximum volume setting (variable) (100% modulation) Impedance: 10 kilohms
Input	VIDEO INPUT 1, 2 and 3 (phono jacks) Video: 1 Vp-p, 75-ohms unbalanced, sync negative Audio: 500 mVrms (100% modulation) Impedance: 47 kilohms S VIDEO INPUT (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal) 75-ohms	Power requirements Power consumption Accessories supplied Optional accessories	120 V AC, 60 Hz 170W (max.) 1W (in standby condition) Remote Commander RM-755 with 2 size AA batteries Antenna connector U/V mixer EAC-66 Connecting cord VMC-810S/820S RK-74A

Design and specifications subject to change without notice.

**TRINITRON® COLOR TV**  
**SONY®**



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### WARNING !!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.  
THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

### SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

### ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUSSION PROVENANT D'UN CHÂSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ÊTRE UTILISÉ LORS DE TOUT DÉPANNAGE.  
LE CHÂSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDE À L'ALIMENTATION SECTEUR.

### ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MARQUE  SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES SONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDICUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

## SAFETY CHECK-OUT (US MODEL ONLY)

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the condition of the monopole antenna (if any). Make sure the end is not broken off, and has the plastic cap on it. Point out the danger of impalement on a broken antenna to the customer, and recommend the antenna's replacement.
8. Check the B+ and HV to see they are at the values specified. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
9. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

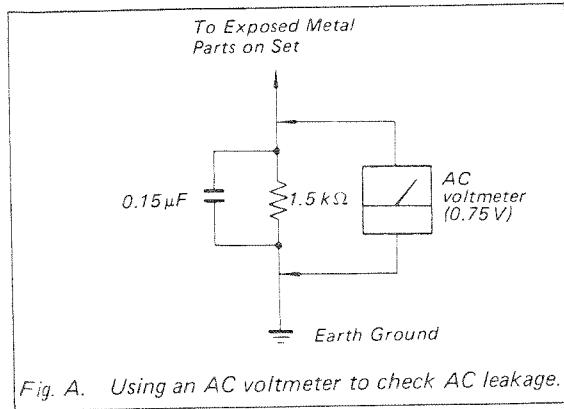


Fig. A. Using an AC voltmeter to check AC leakage.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

### HOW TO FIND A GOOD EARTH GROUND

A cold-water pipe is guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth-ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms. If a cold-water pipe is not accessible, connect a 60–100 watts trouble light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side of the line, the lamp should light at normal brilliance if the screw is at ground potential. (See Fig. B)

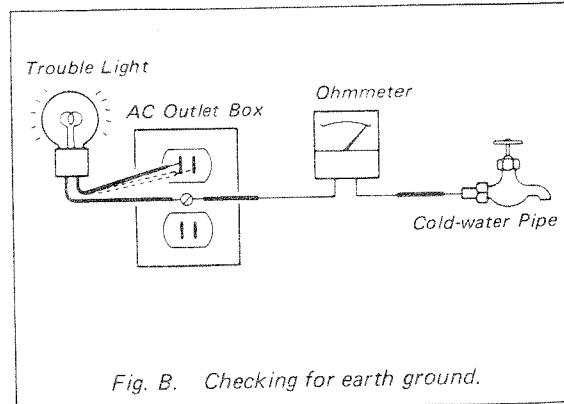
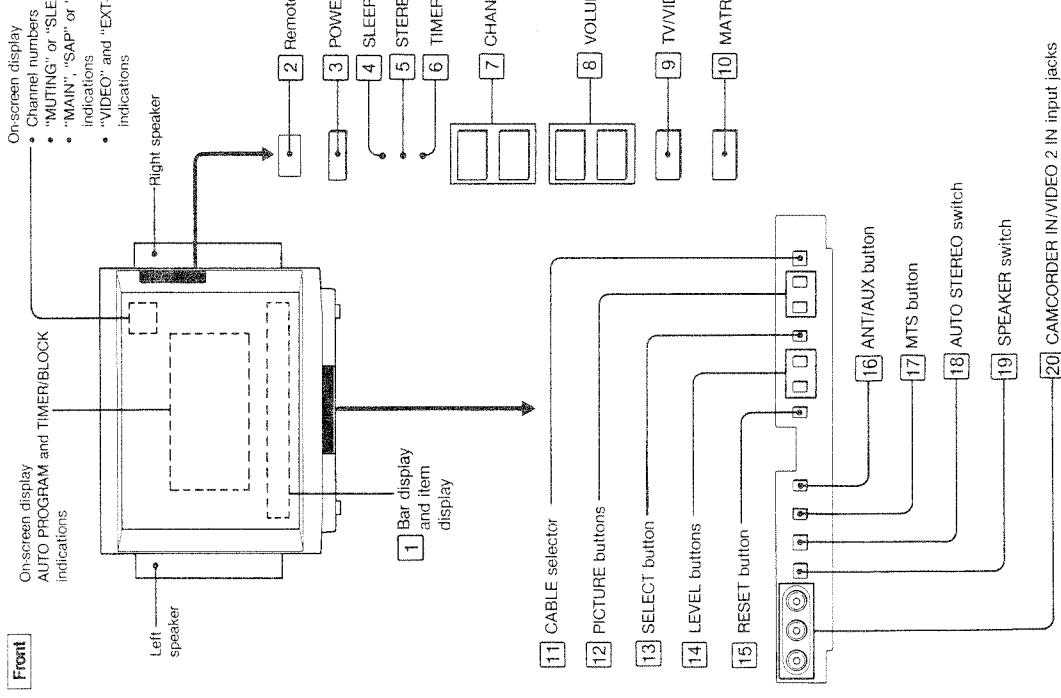


Fig. B. Checking for earth ground.

# SECTION 1

## GENERAL

### 1-1. LOCATION AND FUNCTION OF CONTROLS

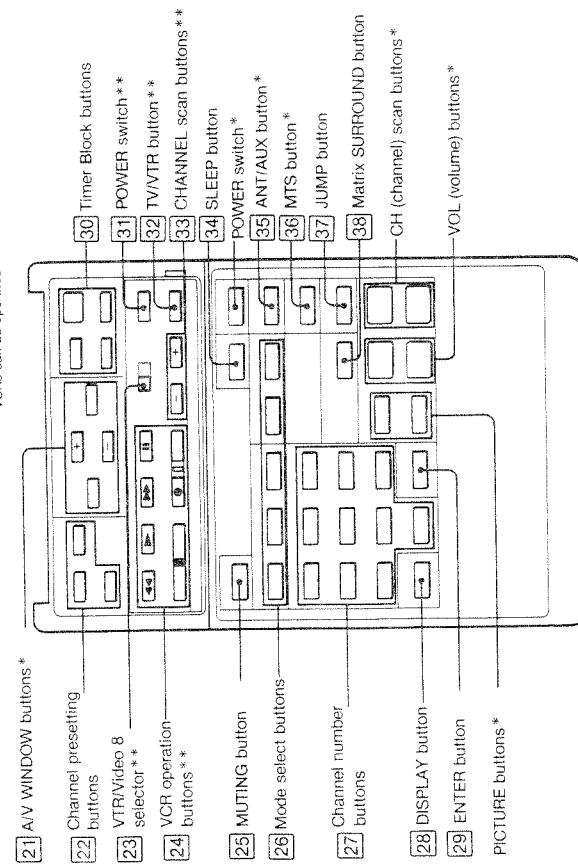


- [1] **Bar display**  
Indicates picture or sound level setting. Also the reflecting surround mode indication is displayed here.
- [2] **Remote control detector**  
Point the Remote Commander towards this detector.
- [3] **POWER switch**  
Press to turn the unit on. Press again to turn the unit off.
- [4] **SLEEP lamp**  
Lights up when the SLEEP button on the Remote Commander is pressed. This lamp also lights up for approx. 17 seconds when the power is turned on.
- [5] **STEREO lamp**  
Lights up when a stereo broadcast is received with the AUTO STEREO switch set to ON.
- [6] **TIMER lamp**  
Lights up to indicate that the program start timer has been set.
- [7] **CHANNEL scan buttons**  
Press "+" for higher-numbered channels or "-" for lower-numbered channels.
- [8] **VOLUME buttons**  
Press "+" to increase volume or "-" to decrease it.
- [9] **TV/VIDEO button**  
Press to monitor the picture or sound coming in through the VIDEO input jacks. Each press on the button changes the mode as follows:  
VIDEO 1 → VIDEO 2 → VIDEO 3 → EXTA → TV
- [10] **MATRIX SURROUND button**  
Press to activate matrix surround. Press again to deactivate it.
- [11] **CABLE selector**  
Set to ON to view cable TV programs. Set to OFF to view VHF or UHF programs.
- [12] **PICTURE buttons**  
Press "+" to increase picture contrast, or "-" to decrease it.
- [13] **SELECT button**  
Press to select items to adjust picture and sound.
- [14] **LEVEL buttons**  
Press +/- to adjust the selected item.
- [15] **RESET button**  
Press to restore the factory preset level of the adjustments.
- [16] **ANT/AUX (antenna auxiliary) button**  
Press to select pay cable TV when a connector is connected.
- [17] **MTS (Multichannel TV sound) button**  
Press to receive a stereo program and/or second audio program.
- [18] **AUTO STEREO switch**  
Normally set this switch to ON.  
Set to OFF when excessive noise is heard during a stereo broadcast because of a weak signal. The sound becomes monaural but the noise should be eliminated.
- [19] **SPEAKER switch**  
Normally set this switch to ON. Set to OFF when connecting an audio system to the AUDIO OUTPUT jacks.
- [20] **CAMCORDER IN/VIDEO 2 IN input jacks**  
Connect to the video and audio output jacks of a portable VCR (e.g. Camcorder), video disc player, etc.

**Remote Commander RM-755**

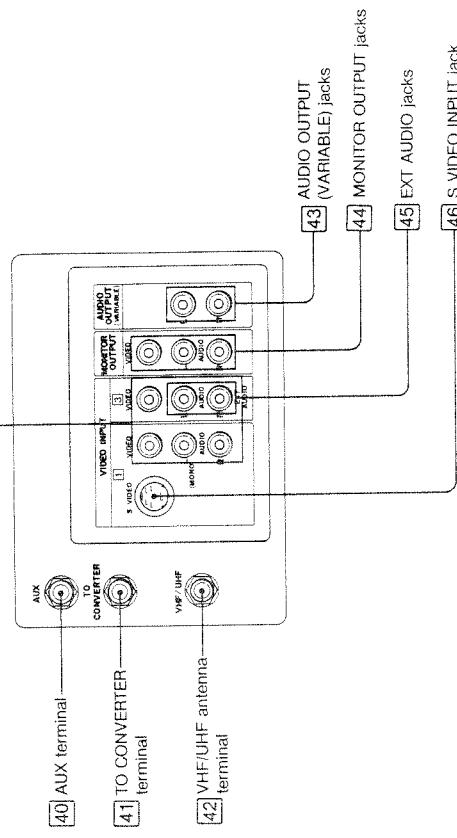
\* The functions of these buttons are available on the TV.

\*\* These buttons are used for VCR operation.  
Only Sony Betamax or 8mm format infrared remote control  
VCRs can be operated with these buttons.



**Rear**

[39] VIDEO INPUT jacks



[39] VIDEO INPUT (1, 3) jacks (phone)  
Connect to the video and audio output jacks of a VCR,  
video disc player, etc.

[43] AUDIO OUTPUT (VARIABLE) jacks (phone)  
Connect an amplifier to monitor the sound through a  
stereo system.

[40] AUX terminal

[41] TO CONVERTER terminal

[42] VHF/UHF antenna terminal

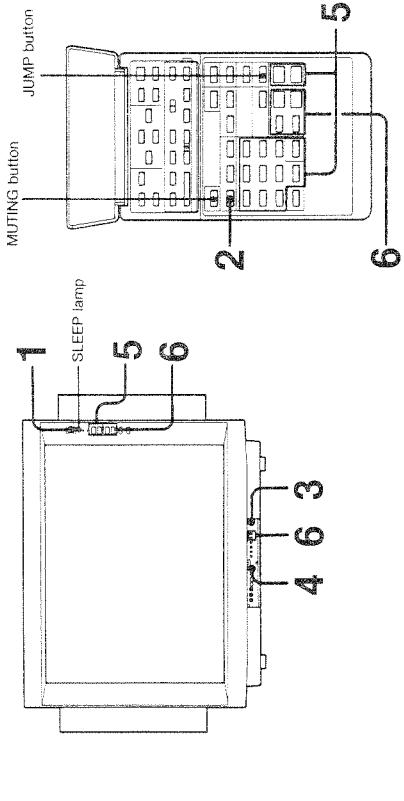
[44] MONITOR OUTPUT jacks (phone)  
Connect to the video and audio input jacks of a VCR  
or color monitor. Either the TV or VCR signal selected  
by the TV/VIDEO button is supplied.

[45] EXT (external) AUDIO jacks (phone)  
An external audio source can be connected to these  
jacks to be combined with the picture displayed on the  
TV. Connect to the audio line output of the audio  
source.

[46] S VIDEO INPUT jack (4-pin mini DIN)  
Connect to the S video output jack of a VCR.

## 1-2. OPERATION

### Seeing TV program



- 1 Press POWER to turn on the TV.
- 2 If the "VIDEO 1", "VIDEO 2", "VIDEO 3", or "EXTA" indication is displayed on the screen, press the TV button on the Remote Commander so that a channel number is displayed.
- 3 Set the CABLE selector  
For VHF and UHF channels : OFF  
For cable TV programs : ON
- 4 Press the ANTI/AUX button as necessary.  
For VHF, UHF and regular cable TV channels: the "AUX" indication should be off.  
For pay cable TV channels, the indication should be displayed.
- 5 Select channels in one of the following two ways.
  - Press the numeral(s) of the channel, then press ENTER.
  - Example: To select channel 6, press 6 and ENTER.  
To select channel 125, press 1, 2, 5 and ENTER.
- If you pressed a wrong numeral, wait for a few seconds until it disappears. Then, try again.
  - Press CH or CHANNEL "+" for higher-numbered channels and "-" for lower-numbered channels.
- 6 Press VOL or VOLUME "+" or "-" to adjust the volume and PICTURE "+" or "-" to adjust the picture.

To switch quickly between 2 channels, press JUMP.

Each time JUMP is pressed, the channel which appeared on the screen directly before is recalled. This button enables you to keep track of two programs alternately.

To mute the sound, press MUTING.

The "MUTING" indication will appear on the screen. To restore the sound, press MUTING again or VOL +/-.

To turn off the unit, press POWER again.

To have the TV turn off automatically after 1 hour, press SLEEP.

The "SLEEP" indication will appear on the screen for a few seconds and the SLEEP lamp on the TV will remain lit until the TV is turned off. To cancel the SLEEP timer, press SLEEP again so that the SLEEP lamp goes out, or turn off the TV.

### Preparation

Make sure the following are properly set.  
• Press TV/VIDEO button as many times as necessary so that the onscreen "EXTA" indication is displayed.

- For over-the-air FM broadcasts, the CABLE selector should be OFF.
- For over-the-cable FM broadcasts, the CABLE selector should be ON, and depending on the channel to be viewed, the onscreen "AUX" indication should be as follows:

(Press ANT/AUX button to change as necessary.)

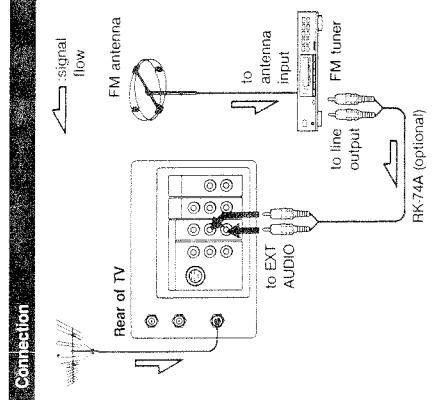
For regular cable TV channels:  
The indication should be off.

For pay cable TV channels:  
The indication should be displayed.

### Enjoying FM Simulcasted Programs

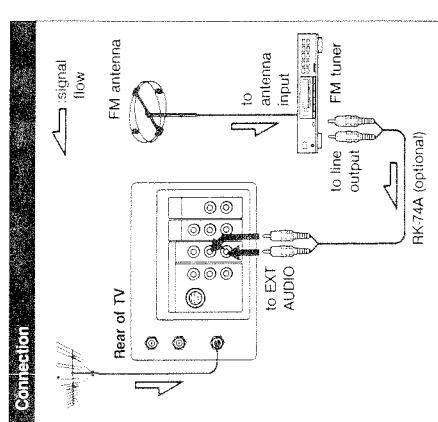
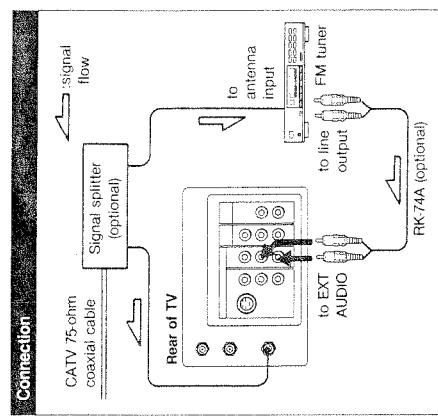
#### Over-the-air FM simulcasts

Sometimes a TV station and an FM radio station will broadcast a program simultaneously so that viewers can enjoy TV programs in high-fidelity stereo. The video portion of the program is viewed normally by selecting the correct channel and the audio portion is heard in stereo by tuning to the correct FM station of the user's FM tuner. This TV featuring double-sided speakers has been equipped with External audio (L/R) jacks to allow the user to connect an FM tuner so that stereo simulcasts can be enjoyed on the TV's stereo speakers. Set up is shown below.



#### Over-the-cable FM simulcasts

Cable TV companies have also started "simulcasting" some channels like MTV (Music Television) and selected movies in stereo over the cable. In the case of cable stereo programs, however, the audio signal is not sent over the air but sent on FM frequencies over the cable. By splitting the incoming cable signal and running it to both the TV tuner and an FM tuner/receiver, these cable programs can be enjoyed in stereo over the TV's double-sided speakers as shown below.



### Operation

- 1 Set the FM tuner to the frequency designated by the broadcaster.
- 2 Operate the TV the same as in usual TV viewing.

## 1.3. PRESETTING CHANNELS

### Enjoying Matrix Surround Effect

To enjoy sound reproduction with the atmosphere of a movie theater or a concert hall, press the MATRIX SURROUND button when the stereo sound is received. Press the button again to deactivate Matrix surround.

	On-screen indication
Matrix surround	H··H
Turned ON	H··H → H··H ←
Turned OFF	H··H ← H··H →

### Additional Picture and Sound Adjustment

- 1 Press SELECT consecutively until the on-screen display of the item you desire to adjust appears. The display will change as follows:



- The display will disappear after a few seconds but will appear again when the next step is taken.

- 2 Press LEVEL + (H/Y- (L)) to adjust the selected item.

Selected item	- (L) Left button	+ (R) Right button
HUE	Skin tones become pinkish	Skin tones become greenish
COLOR	For less color intensity	For more color intensity
PICTURE ADJUSTMENT: BRIGHT	For less brightness	For more brightness
SHARPNESS	For less sharpness	For more sharpness
TREBLE	To decrease treble response	To increase treble response
SOUND BASS	To decrease bass response	To increase bass response
SOUND BALANCE	To emphasize the left speaker's volume	To emphasize the right speaker's volume
ADJUSTMENT		

### On-screen color-bar displays

When any of the above adjustments are made, a colored segment bar appears on the screen to indicate the appropriate setting level.

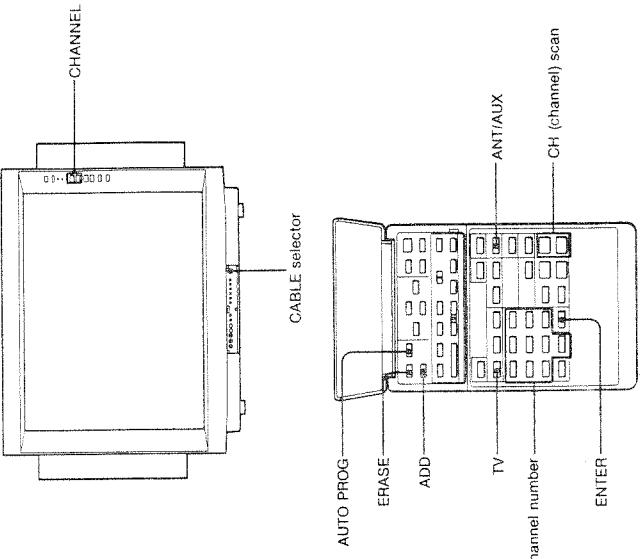
To clear the adjustment levels and restore the factory preset levels at once, press RESET. (A "RESET" indicator will appear for a few seconds.)

Use the supplied Remote Commander.

Both automatic and manual programming are available. Automatic programming presets all the receivable channels automatically. With manual programming, you can preset only the desired channels.

When the presetting has been completed, only the preset channels appear, in numerical sequence, when CH (CHANNEL) +/- are pressed.

Receivable channels of this unit are:  
VHF: 2-13  
UHF: 14-69  
Cable: 1-125



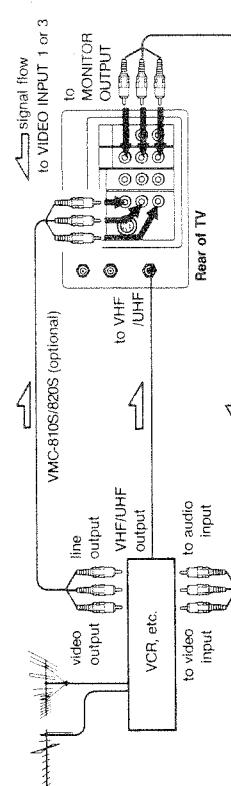
## 1-4. APPLICATIONS WITH OPTIONAL EQUIPMENT

### VCR Connection

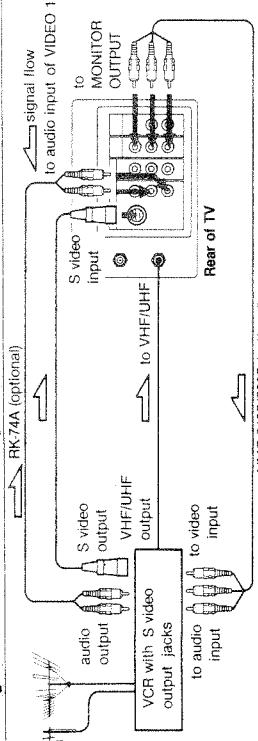
With the following connection, you will be able to...

- View the playback of the video tapes
- Record TV programs
- Record a TV program while viewing another

#### 1 Connecting the Ordinary VCRs



#### 2 Connecting the VCRs with S Video Output Jack



A portable VCR, video camera recorder can be easily connected to the CAMCORDER IN/VIDEO 2 on the front panel.

#### About S video input

Video input and output signals may be separated into Y (luminance or brightness) and C (chroma or color) signals. Usually these two signals are combined in a VCR and sent as one signal to a TV. Separation of the Y and C signals prevents them from interfering with one another, thereby improving picture especially in color quality. This unit is equipped with an S video input jack through which these separated signals can be input directly.

#### Notes on connection

- Up to three VCRs or other equipment can be connected to VIDEO INPUT 1, 3 jacks and CAMCORDER INPUT 2 jacks.
- When connecting a VCR and other equipment to the TV, connect the VCR to VIDEO 1.
- The signals input from VIDEO 1 are not output from MONITOR OUT.
- When connecting a monaural source to VIDEO 1, connect it to L jack. The monaural sound is heard from both speakers.

#### When connecting to S VIDEO INPUT

- Connect to audio input jacks of VIDEO 1.
- The picture from the video input jack of VIDEO 1 (phono jack) is not displayed.
- Select the VIDEO 1 mode to see the picture from S video.

#### Notes

- When an audio system is connected to AUDIO OUTPUT, be sure to set the SPEAKER switch to OFF. The sound from the TV's speakers will be cut off.

### To Monitor the TV or Connected VCR Sound through an Audio System

- 1 Turn on the TV.
- 2 Press the VIDEO button or a mode select button so that the "VIDEO 1", "VIDEO 2", or "VIDEO 3" indication appears on the screen.

— Record TV programs connected to VIDEO INPUT 1 and S VIDEO INPUT

VIDEO 2; for equipment connected to VIDEO INPUT 2

VIDEO 3; for equipment connected to VIDEO INPUT 3

#### Operation

For operation, refer to the instruction manual furnished with the VCR.

**When using a Sony infrared remote control VCR,** the VCR can be operated with the supplied Remote Commander.

- 1 Set the VTR/VIDEO 8 selector.

— Sony Betamax VCR, VTR

— Sony BSRM VCR

- 2 Press the VCR operation button on the Commander.

#### To return to the TV mode

— Press the TV/VIDEO button on the TV until a channel number appears on the screen.

— Press the TV button on the Remote Commander.

**When you cannot obtain a clear picture and/or sound**

Make sure that the TV/VIDEO program select button on the VCR is set to TV. Re-select the desired channel with the buttons on the TV or TV Remote Commander.

**Sound level adjustment**

Keep the amplifier volume, bass and treble controls to certain positions usually at the medium position and adjust the level with the VOLUME buttons on the TV or the VOL buttons on the Commander; BASS and TREBLE controls to match the sound level of other audio equipment or to your preference.

**Caution**

Television programs, films, videotapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

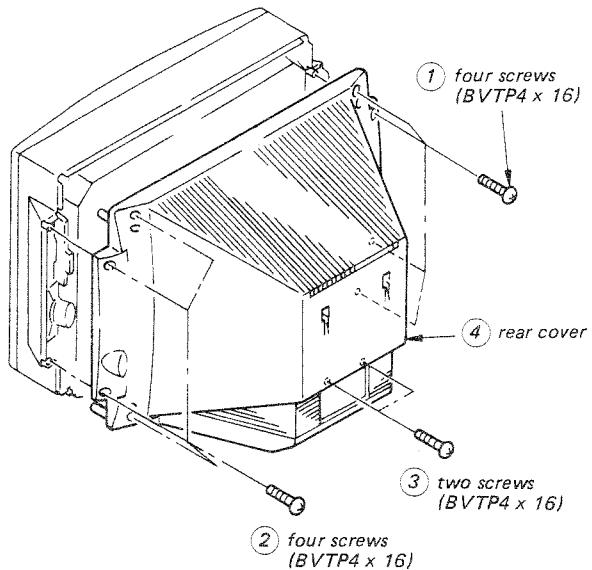
## 1-5. TROUBLESHOOTING

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below.

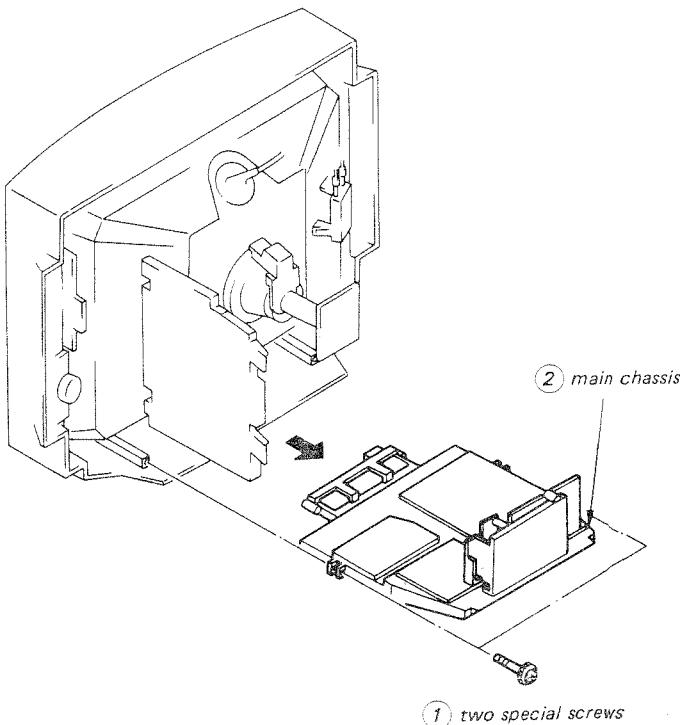
SYMPOTM	CHECK AND ADJUST
Poor or no picture (screen not lit), good sound	<ul style="list-style-type: none"> <li>• Adjust PICTURE.</li> <li>• Adjust BRIGHT.</li> <li>• Check antenna/cable connections.</li> </ul>
Good picture, no sound	<ul style="list-style-type: none"> <li>• Press VOLUME +.</li> <li>• Release MUTING on the Remote Commander.</li> <li>• Check that the MTS button is set correctly.</li> <li>• Check that the TV/VIDEO button or mode select button is set correctly.</li> <li>• Set the SPEAKER switch to ON</li> </ul>
No picture (screen not lit), no sound	<ul style="list-style-type: none"> <li>• Is POWER switched on?</li> <li>• Power in outlet?</li> <li>• Check that the TV/VIDEO button is set correctly.</li> </ul>
No color	<ul style="list-style-type: none"> <li>• Is it a color program?</li> <li>• Adjust COLOR.</li> </ul>
GENERAL	<ul style="list-style-type: none"> <li>• Is it an active or the correct channel?</li> <li>• Check the CABLE selector setting.</li> <li>• Check antenna/cable connections.</li> <li>• Check that the ANT/AUX button is set correctly.</li> </ul>
Dotted lines or stripes	 <p>This is often caused by local interference. (e.g. cars, neon signs, hairdryers etc.) Adjust antenna for minimum interference.</p>
Double images or ghosts	 <p>Reflections from nearby mountains or buildings often cause this problem. A highly directional outdoor antenna or a CATV cable may improve the picture.</p>
	Try another channel. It could be station trouble.

## SECTION 2 DISASSEMBLY

### 2-1. REAR COVER REMOVAL

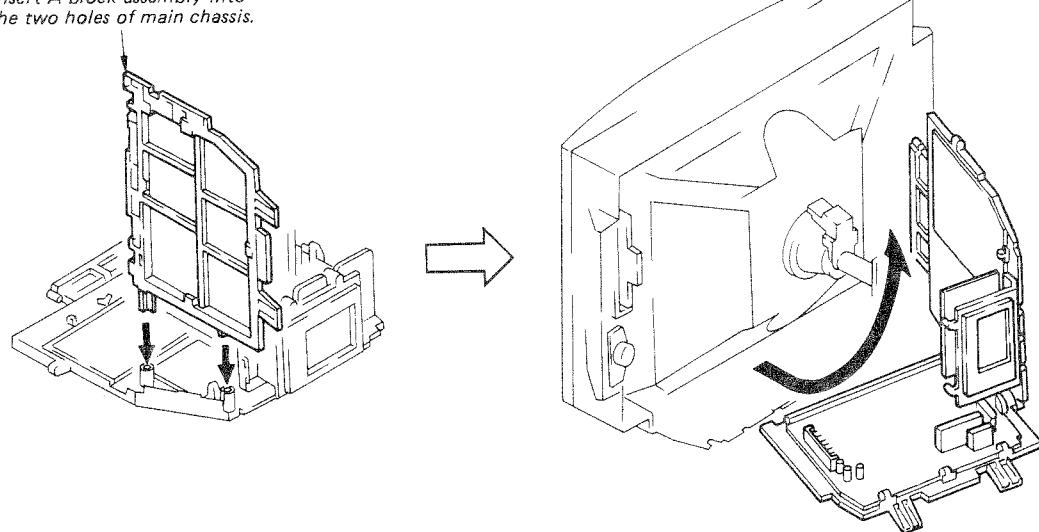


### 2-2. MAIN CHASSIS REMOVAL



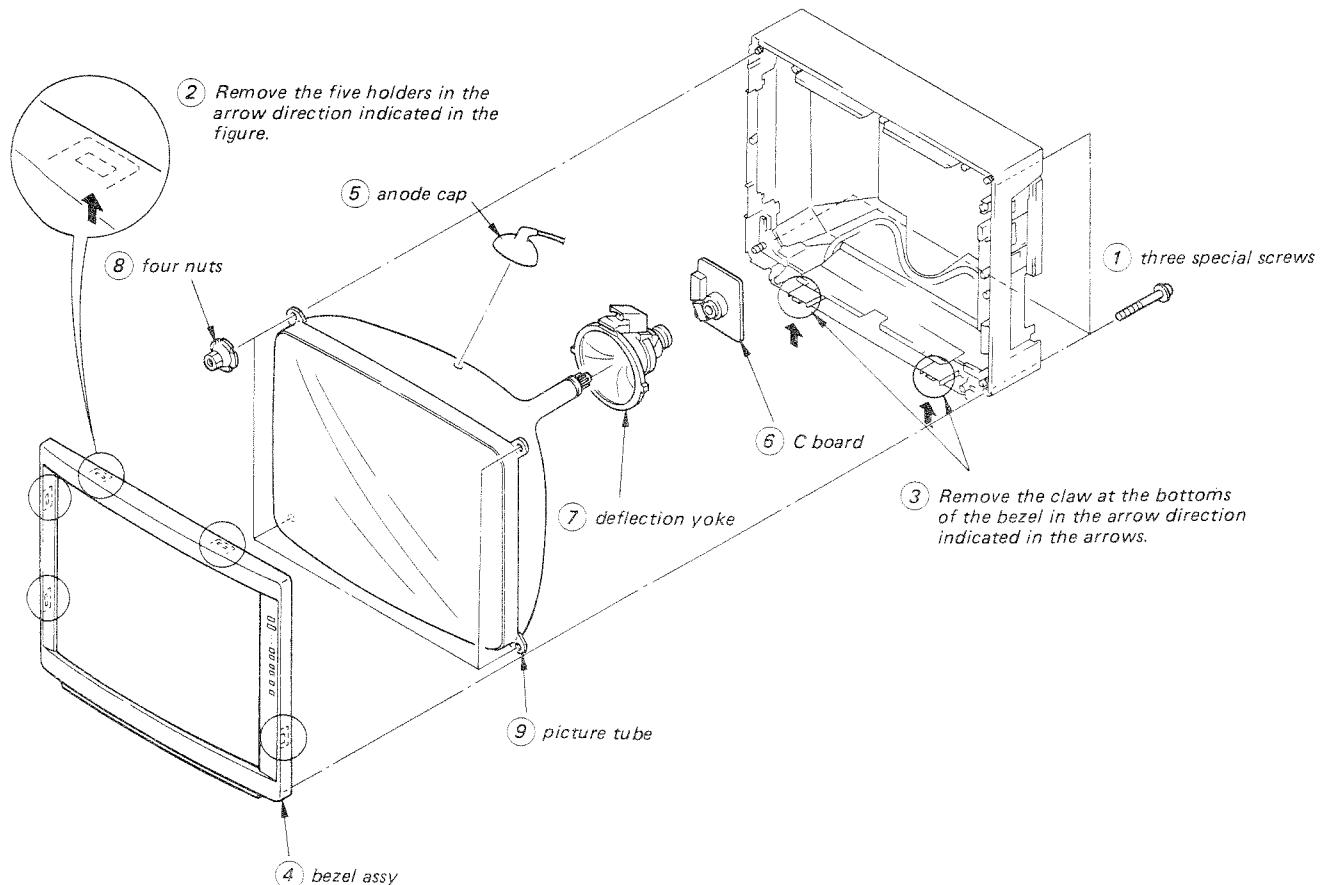
### 2-3. SERVICE POSITION

① Insert A block assembly into the two holes of main chassis.



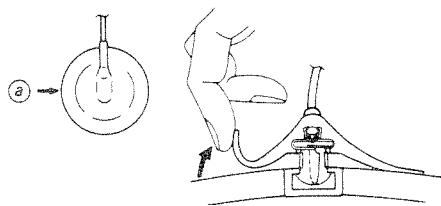
② Turn it 90° in the direction of arrow.

## 2-4. PICTURE TUBE REMOVAL

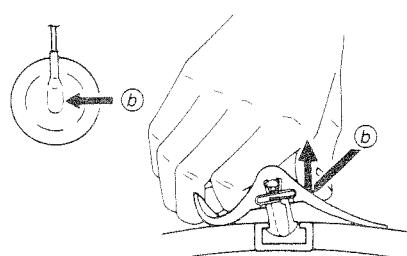


## REMOVAL OF ANODE CAP

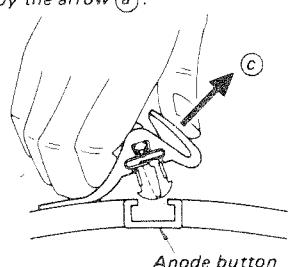
## • Removing Procedures



- ① Turn up one side of the rubber cap in the direction indicated by the arrow (a).



- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow (b).



- ③ When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow (c).

## SECTION 3

### SET-UP ADJUSTMENTS

- The following adjustment should be made when a complete realignment is required or a new picture tube is installed.
  - These adjustments should be performed with rated power supply voltage unless otherwise noted.

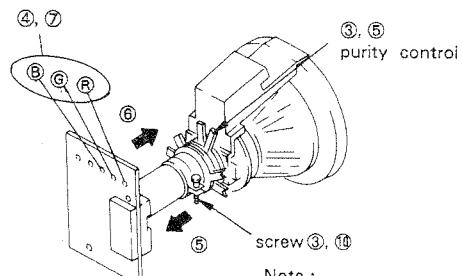
Controls and switch should be set as follows unless otherwise noted:

PICTURE button ..... 80%  
BRIGHTNESS ..... 50%

### **3-1. BEAM LANDING**

### **Preparation :**

- Before starting, degauss the entire screen.
  - 1. Turn on set power supply and receive an all-white signal.
  - 2. Evenly degauss the entire screen.
  - 3. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Figure 3-1.
  - 4. Set BKG VR ② to maximum and set ④ and ⑤ to minimum.
  - 5. Move the deflection yoke back, and adjust the purity control so that ④ is in the center and ⑥ and ⑦ are at the sides, evenly. (Figure 3-2.)
  - 6. Move the deflection yoke forward so that the entire screen is red.
    - \*If the deflection yoke is pushed all the way to the CRT then moved slightly back, landing adjustment is easier.
  - 7. Substitute ⑧, then ⑨ for ⑩ in step 4 and check landing.
  - 8. Rotate ⑪, ⑫ and ⑬ once each and check landing.
  - 9. When landing is not right, adjust the purity control and use magnets as shown in figure 3-3, then repeat steps 7 and 8.
  - 10. When a magnet is used, be sure to perform step 2, and tighten deflection yoke mounting screw loosely.



Note :  
The circled numbers  
(③ – ⑦) shown  
above steps.

Perform the adjustments in order as follows:

1. Beam Landing
  2. Convergence
  3. Focus Adjustment
  4. White Balance

Note : Test Equipment Required.

1. Color-bar / Pattern Generator
  2. Degausser
  3. Oscilloscope

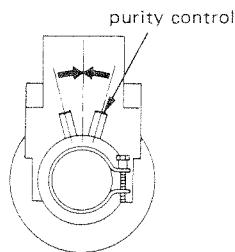


Fig. 3-1.

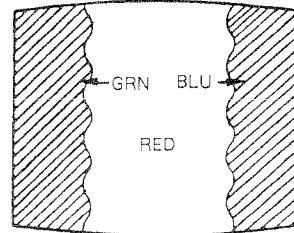


Fig. 3-2.

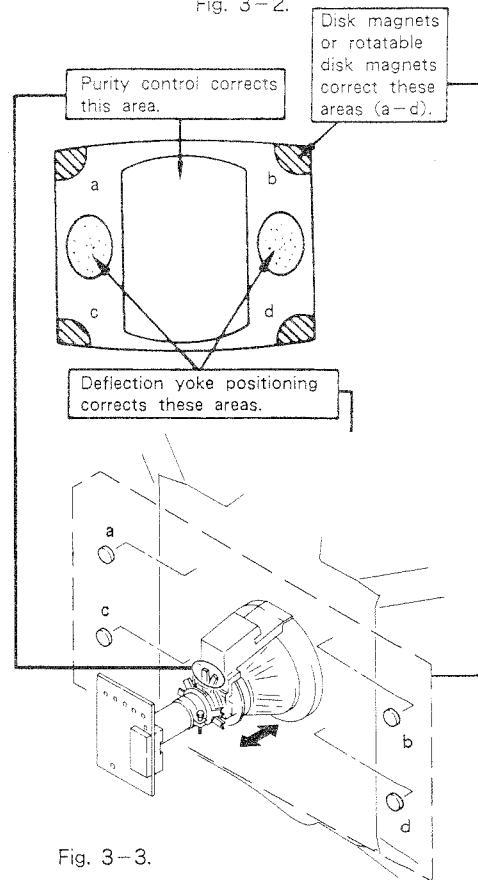
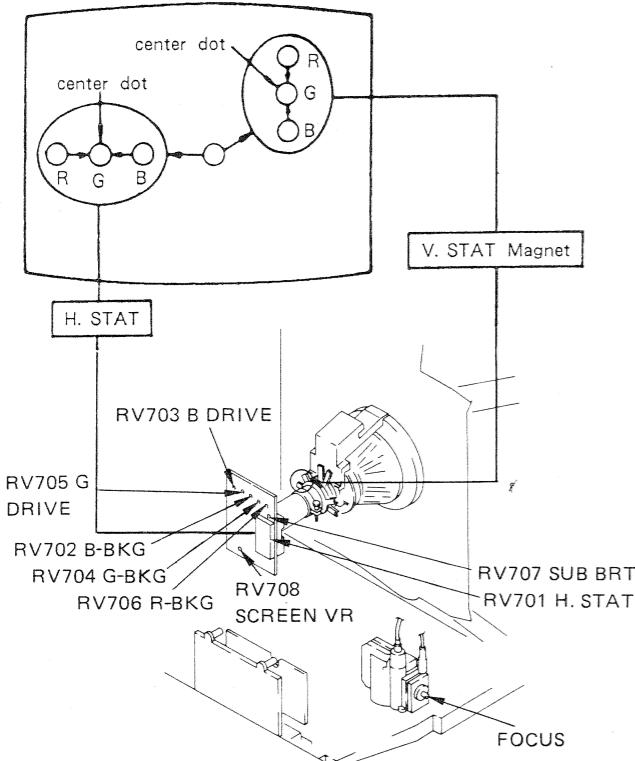


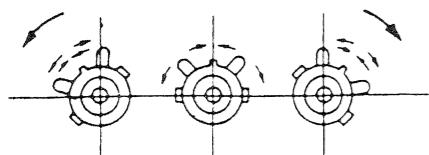
Fig. 3-3.

**3-2. CONVERGENCE****Preparation :**

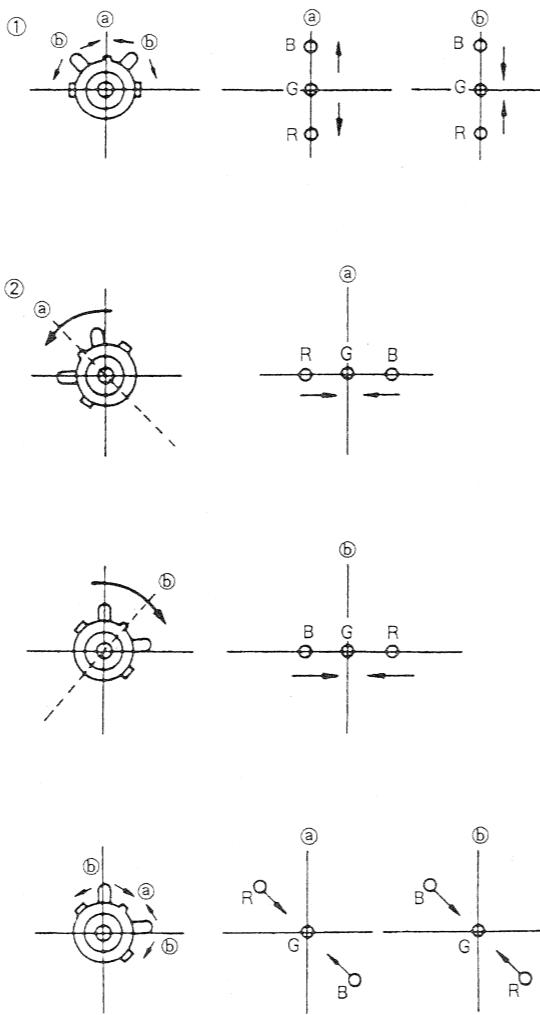
- Before starting, perform FOCUS, H. SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS to minimum.
- Feed in the dot pattern.

**(1) Horizontal and Vertical Static Convergence**

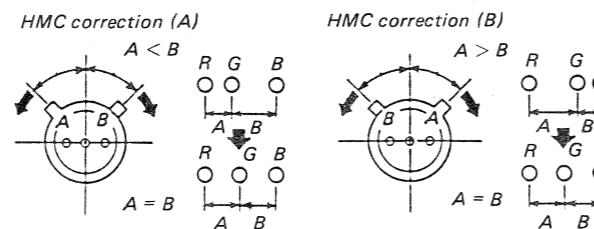
1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen (Horizontal movement).
2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen (Vertical movement).
3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
4. Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



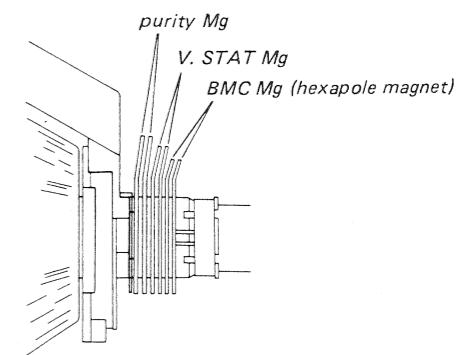
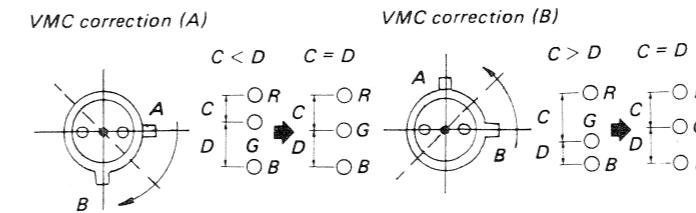
4. When the V. STAT magnet is moved in the direction of arrow ① and ②, Red, Green and Blue dots move as shown below.



- **HMC and VMC correction for Hexapole Magnet.**
1. HMC (Horizontal, Mis, convergence) correction and motion of the Electron Beam with the Hexapole Magnet.



2. VMC (Vertical, Mis, convergence) correction and motion of the Electron Beam with the Hexapole Magnet.

**(2) Dynamic Convergence Adjustment****Preparation :**

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
1. Loosen deflection yoke screw.
  2. Remove deflection yoke spacers.
  3. Move the deflection yoke for best convergence as shown in Fig. 3-4.
  4. Tighten the deflection yoke screw.
  5. Install the deflection yoke spacers.

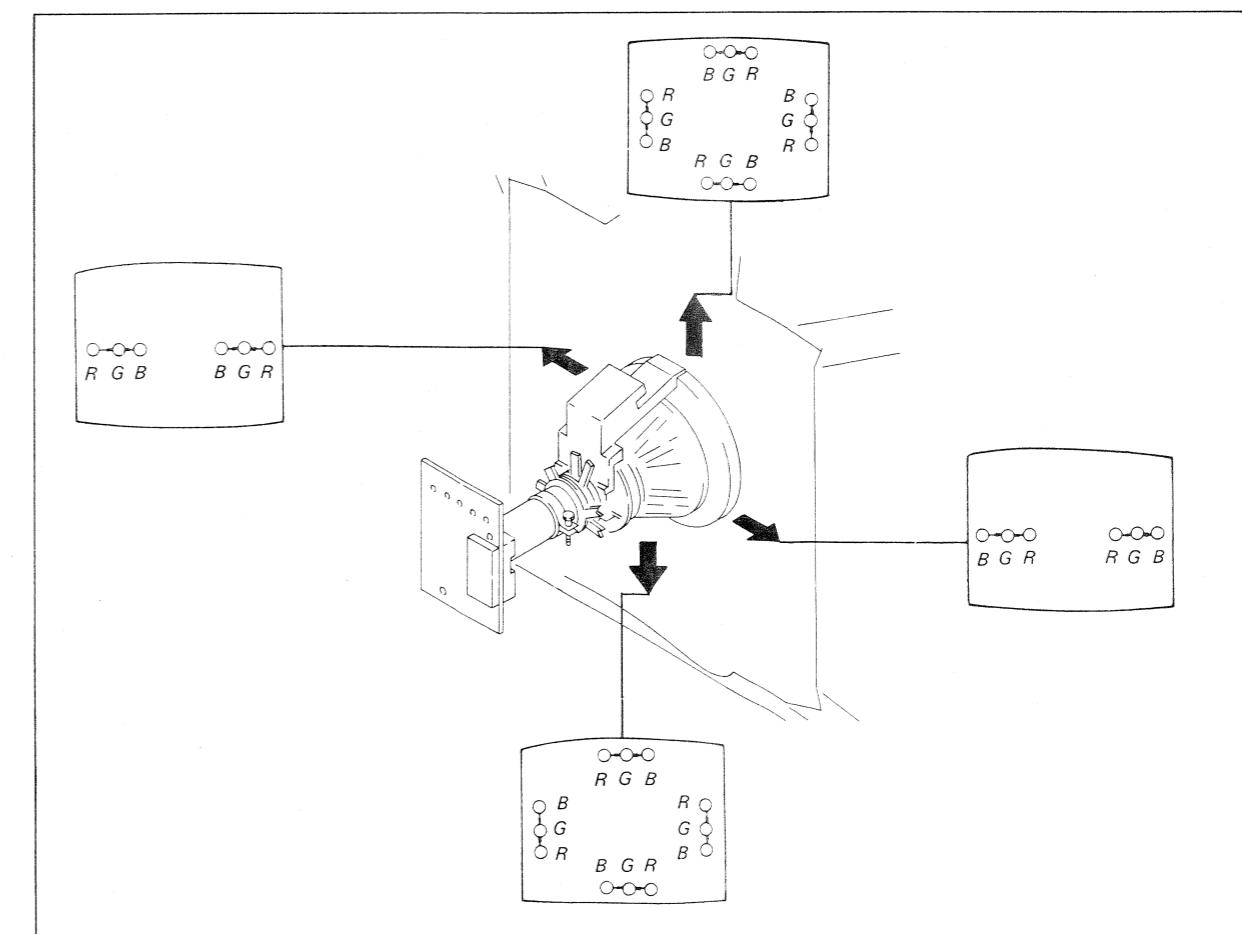
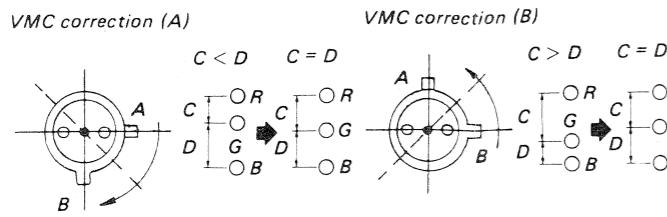


Fig. 3-4

in the  
d Blue

2. VMC (Vertical, Mis, convergence) correction and motion of the Electron Beam with the Hexapole Magnet.



#### (2) Dynamic Convergence Adjustment

##### Preparation :

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
- 1. Loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.
- 3. Move the deflection yoke for best convergence as shown in Fig. 3-4.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.

agnet.  
on and  
xapole

R G B  
O O O  
A B  
R G B  
O O O  
A B

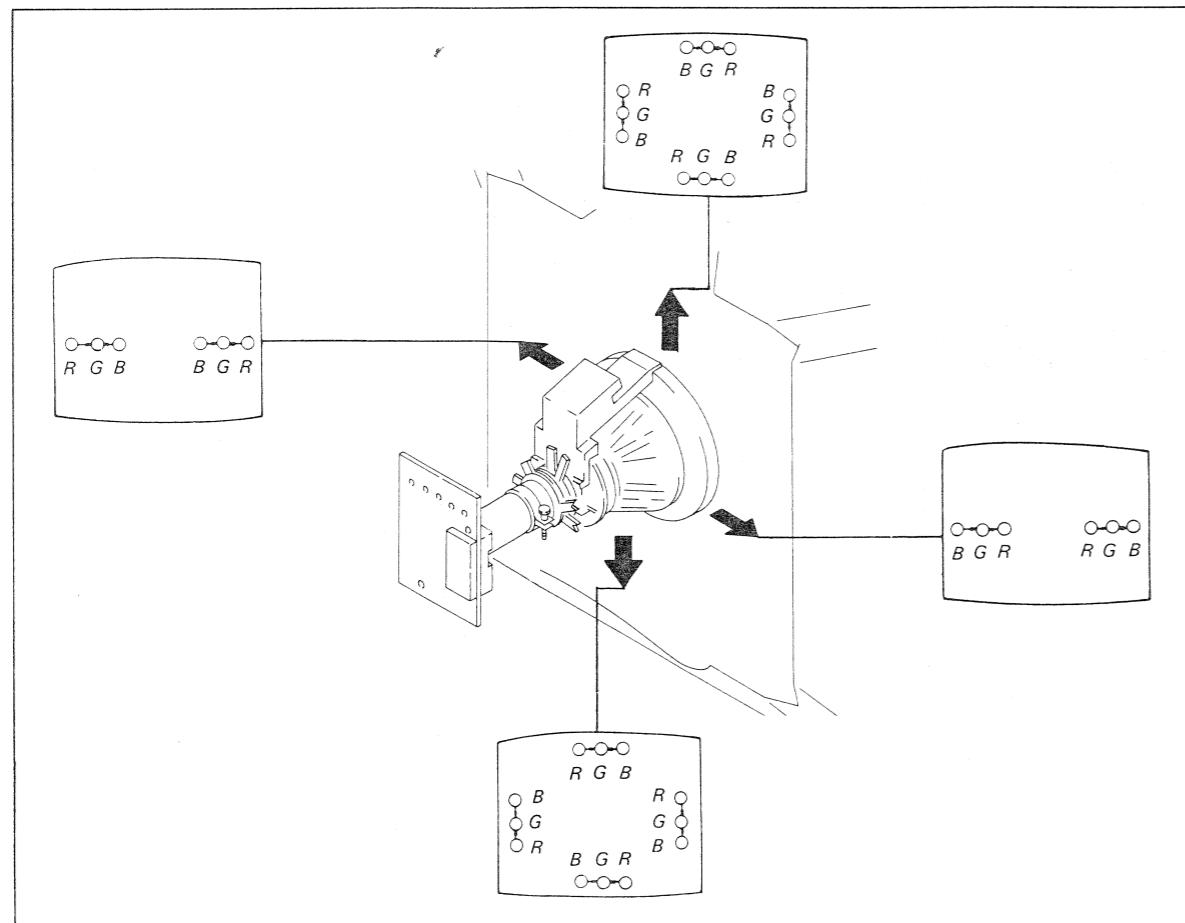
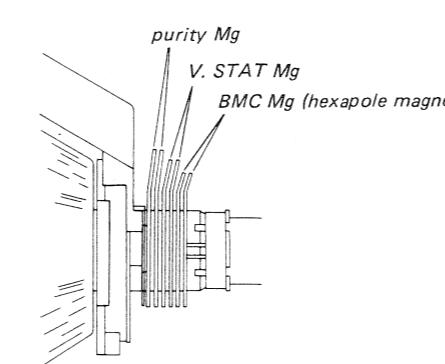
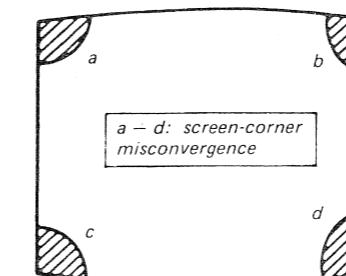


Fig. 3-4



#### (3) Screen-corner Convergence



#### 3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for a best focus.

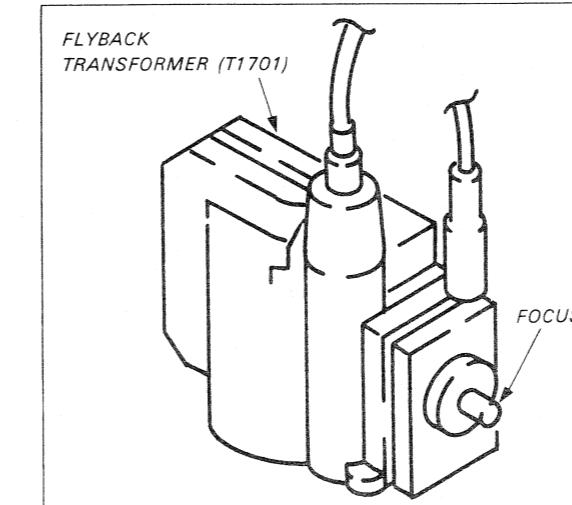


Fig. 3-5

#### 3-4. WHITE BALANCE

- Feed in the dot signal from pattern generator.
- PICTURE button ..... 80%
- BRIGHTNESS ..... 50%

##### [SCREEN (G2)]

1. Adjust BKG VRs (RV702, RV704, and RV706) so that voltages on the red, green and blue cathodes are 180 V dc with an oscilloscope as shown in Fig. 3-6.

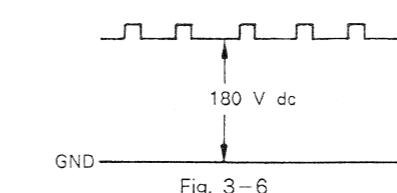
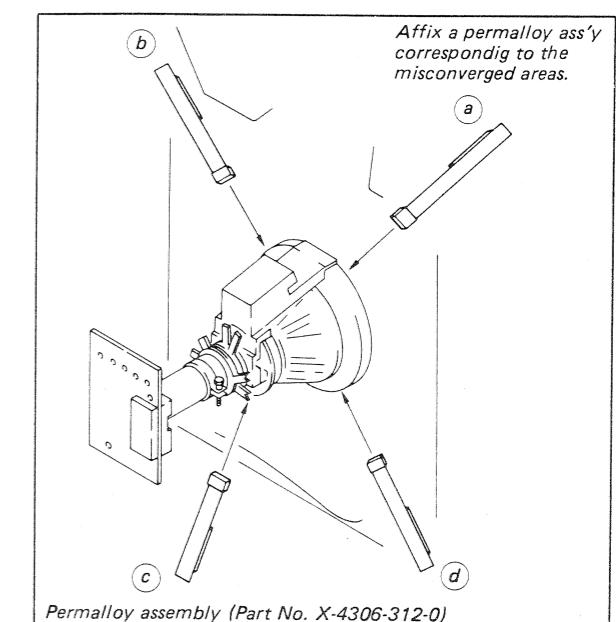


Fig. 3-6

Affix a permalloy ass'y correspondig to the misconverged areas.



Permalloy assembly (Part No. X-4306-312-0)

2. Observe the screen and adjust RV708 (SCREEN) to obtain the faintly visible background of dot signal.

Note the color that first becomes visible by turning SCREEN VR.

Do not turn a BKG control for this color.

##### [WHITE BALANCE]

1. Feed in the white signal from pattern generator.
2. Set the PICTURE button to obtain the faintly visible raster on the screen.
3. Observe the screen and adjust the other two BKG VRs for best white balance.
4. Set the PICTURE button at maximum.
5. Observe the screen and adjust the DRIVE VRs (RV703, RV705) for best white balance.
6. Repeat steps 2 through 5 several times.

## SECTION 4

### SAFETY RELATED ADJUSTMENTS

#### R1707, CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with  on the schematic diagram).  
IC1710, PM1700, R1703, R1707, R1700, R1713, R1716

##### (1) Preparation before confirmation

1. Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS buttons to maximum.
2. Confirm that the voltage of the TP85 is more than 13 V DC when the set is operating normally with 120 V AC supply.

##### (2) Hold-down operation confirmation

1. Turn the POWER switch ON, and receive entirely white signals and adjust ABL current to  $1580 \pm 20 \mu\text{A}$  with PICTURE and BRIGHT etc buttons.
2. Apply DC voltage of over 17.38 V gradually to the TP85 via 1T40 from the DC stabilized power source. Confirm that the minimum voltage is less than 18.38 V DC whereby the raster disappears during operation of hold-down circuit.

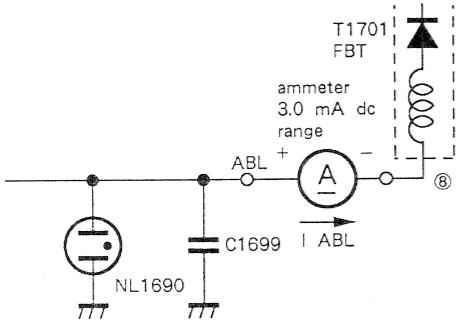
NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

3. Turn the POWER switch ON, and receive dot signals and adjust ABL current to  $210 \pm 10 \mu\text{A}$  with PICTURE and BRIGHT etc buttons.
4. Apply DC voltage of over 18.51 V gradually to the TP85 via 1T40 from the DC stabilized power source. Confirm that the minimum voltage is less than 19.51 V DC whereby the raster disappears during operation of hold-down circuit.

NOTE : When the hold-down circuit starts operating, switch OFF the POWER of the set immediately.

##### (3) Hold-down readjustment

When step (2) is not satisfied, readjustment should be performed by altering the resistance value of R1707 (a component marked with ).



#### CONFIRMATION WHEN REPLACING H. V. R.(HIGH-VOLTAGE RESISTOR)

The following adjustments should always be performed with reference to whether an X-ray radiation control circuit is connected or not, when replacing H. V. R. (High-Voltage Registor)

\*This check is to be performed when H. V. R. only is replaced, and has no relation to the hold-down circuit readjustment for replacement of parts marked .

##### (1) Connection confirmation

1. Turn the POWER switch ON, and receive entirely white signals and set the PICTURE and BRIGHTNESS buttons to maximum.
2. When the set is operating normally with 120 V AC supply confirm that the voltage of the TP85 is over 13 V DC.

\*Use a digital multimeter whose input impedance over  $100 \text{ M}\Omega$  when confirming the voltage of the TP85.

#### CONFIRMATION WHEN REPLACING IC681

With the condition that applying AC 120 V and the TV set is in operation, confirm the AC relay will go off when  $150.5 \pm 0.5 \text{ V}$  is supplied to TP91 from an external DC power supply.

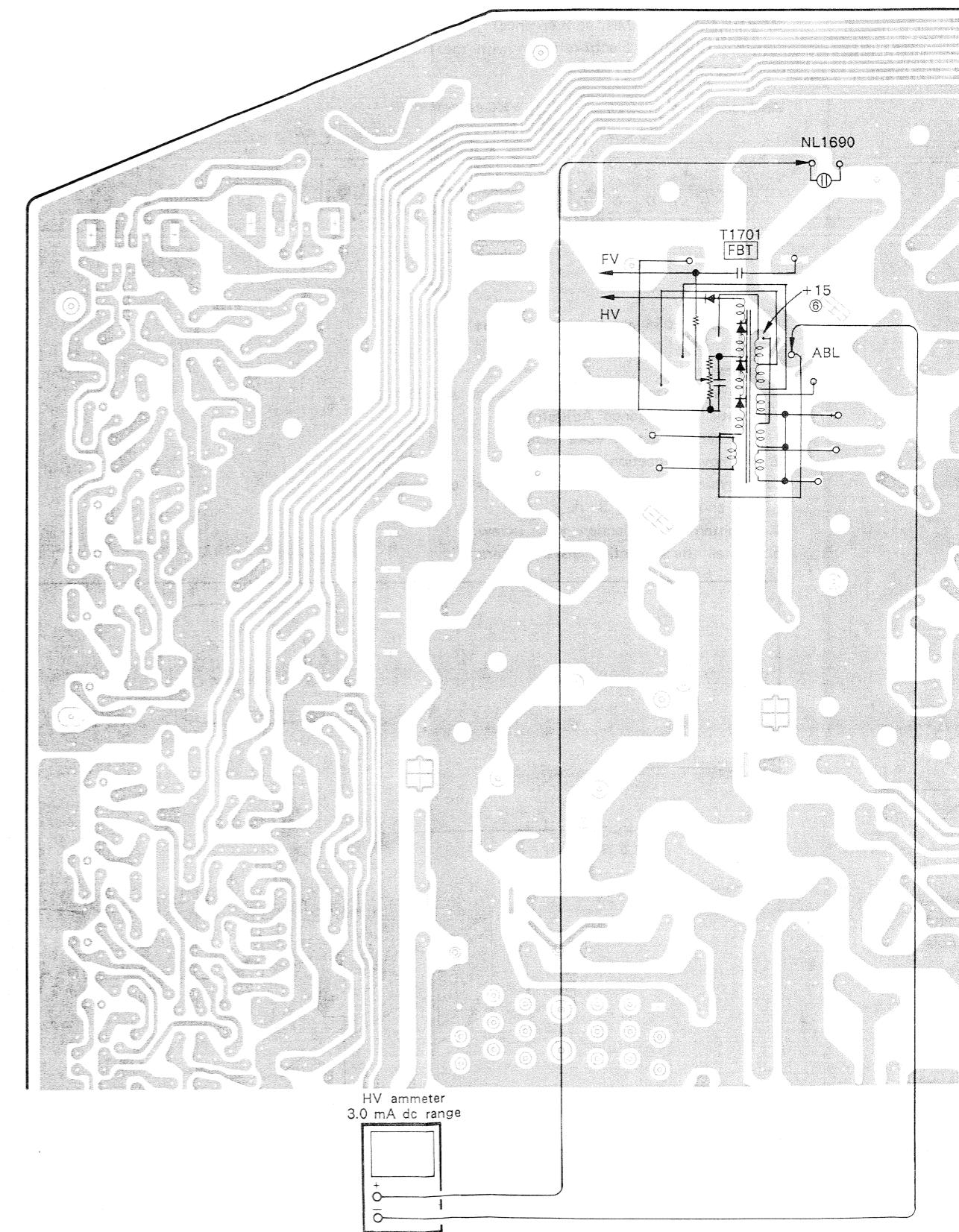
Remove the external DC voltage immediately after the relay went off.

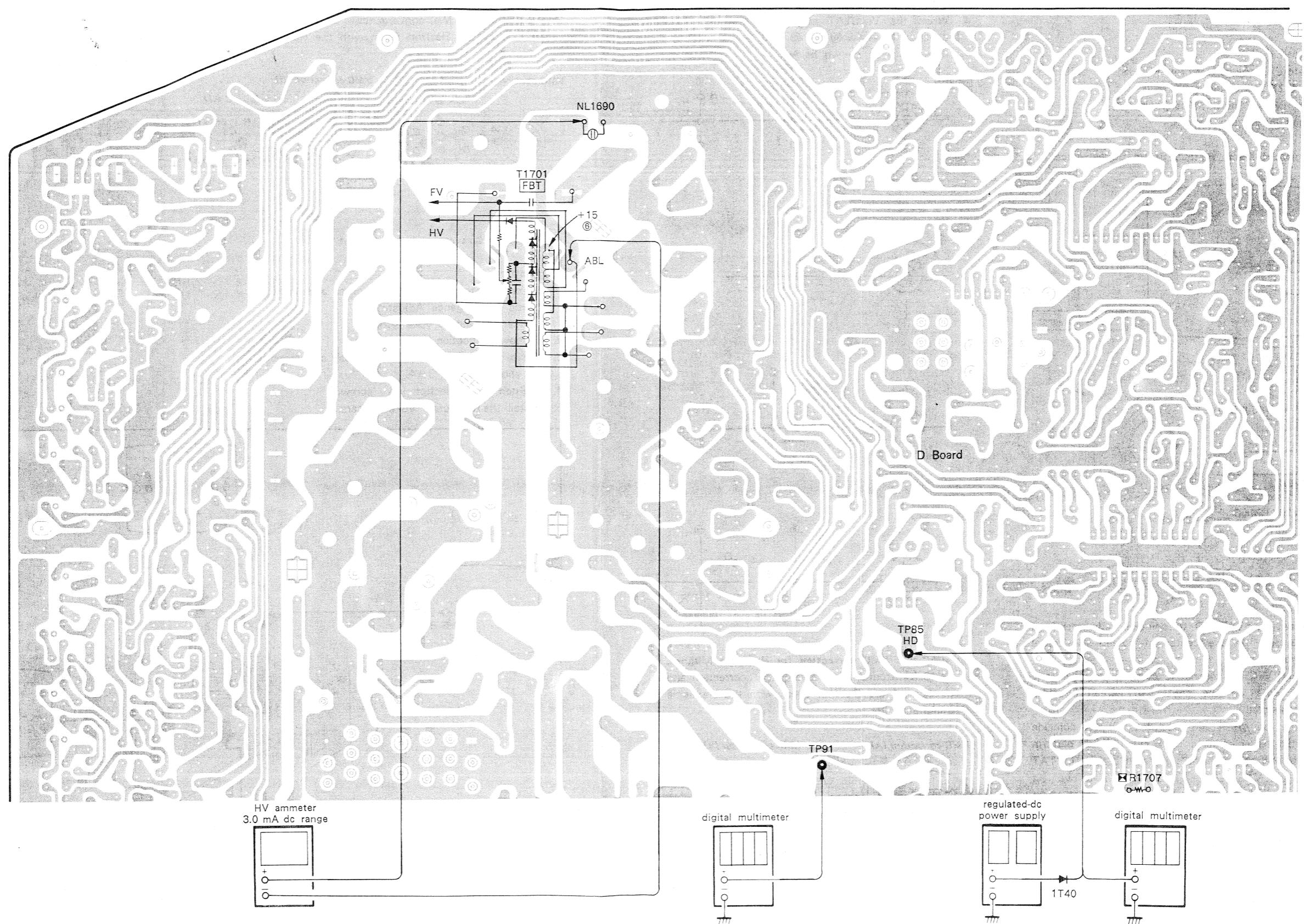
#### +B MAX VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC681.

##### (1) The +B voltage confirmation

1. Supply  $130 \pm 3 \text{ V AC}$  to with variable auto-transformer.
2. Receive monoscope signals.
3. Set the PICTURE button into 80% and the BRIGHTNESS button into RESET.
4. Confirm the voltage of TP91 is less than 136.0 V DC.
5. If step 4 is not satisfied, replace IC681 and repeat above steps.



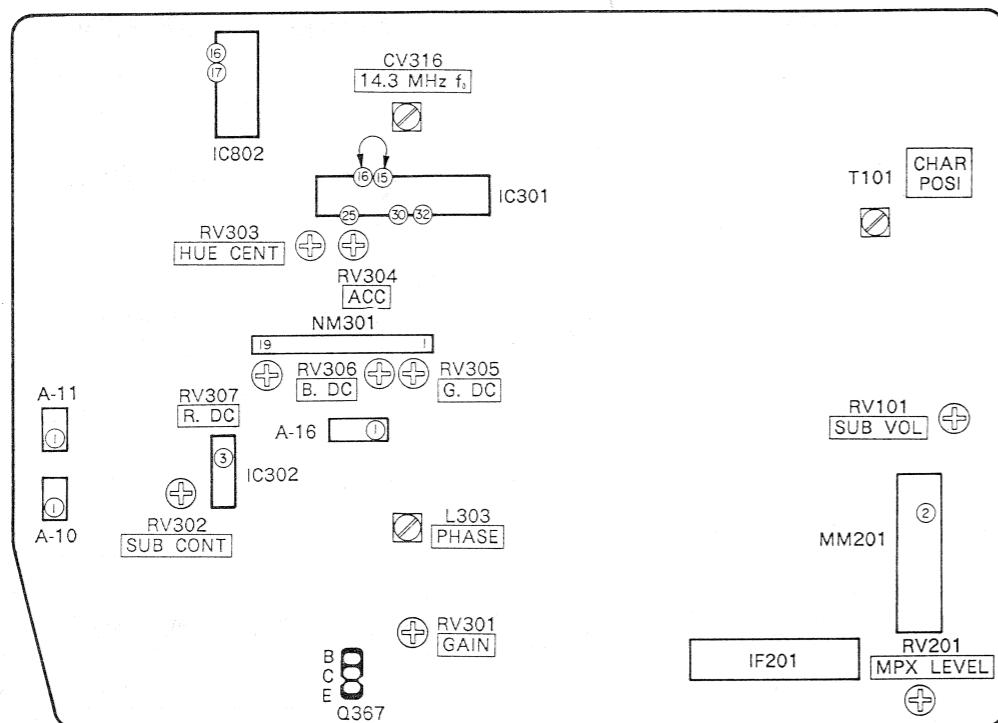


## SECTION 5

### CIRCUIT ADJUSTMENTS

#### 5-1. A BOARD ADJUSTMENTS

A board -Component side-



#### RF AND AGC ADJUSTMENT

1. Adjust with IF201 (VIF PACK) so as to disappear snow noise and cross-modulation.
2. Confirm them at every channel.

#### COMB TYPE FILTER ADJUSTMENT (RV301, L303)

1. Set at TV mode and receive color-bar signal.
2. Connect an oscilloscope to the Y signal output of the comb type filter (the emitter of Q367), and adjust RV301 (GAIN) and L303 (PHASE) taking tracking, so as the chroma component of the waveform to becomes minimum. (Fig. 5-1)

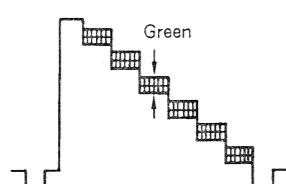


Fig. 5-1

#### 14.3 MHz f<sub>0</sub> ADJUSTMENT (CV316)

1. Receive color-bar signal.
2. HUE VOLUME ..... 50% (Resetting)  
PICTURE VOLUME ..... 70%.

3. Connect pin 20 of IC301 to GND through via 10 kΩ resistor.
4. Short pins 15 and 16 of IC301.
5. Observe pin 20 of IC301 with an oscilloscope, and confirm that the color signal is out of synchronization.
6. Turn CV316 to make color synchronization.

#### SUB-CONTRAST ADJUSTMENT (RV302)

1. Receive color-bar signal.
2. PICTURE ..... MAX  
COLOR ..... MIN
3. Connect an oscilloscope pin 6 of NM301.
4. Adjust to  $2.1 \pm 0.1$  Vp-p with RV302 (SUB CONT) as shown in Fig. 5-2.

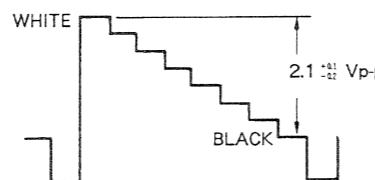
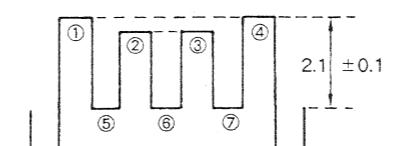


Fig. 5-2

CAUTION: Measurement should be performed under the conditions that removing A-16 connector and not applying ABL.

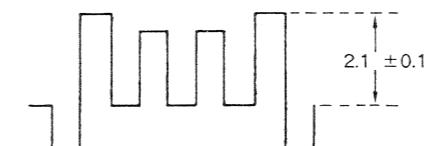
#### HUE ADJUSTMENT AND ACC ADJUSTMENT (RV303, 304)

1. Receive color-bar signal.
2. HUE ..... RESET  
COLOR ..... RESET  
PICTURE .... MAX
3. Observe pin 6 of NM301 with an oscilloscope, and adjust the output waveform so as to become that as shown in the diagram by turning the ACC volume (RV304) and Hue volume (RV303).



Make levels of ① and ④ even, ② and ③. ⑤ to ⑦ have a little residual tilt.

4. Confirm that the voltage pin 25 of IC301 at the middle point of the ACC volume (RV304) should be less than 9 V.
5. Confirm that the blue output pin 6 of NM301 should be  $2.1 \pm 0.1$  V after adjusted.



CAUTION: Measurement should be performed under the conditions that removing A-16 connector and not applying ABL.

#### NEW DYNAMIC COLOR ADJUSTMENT (RV305, RV306, RV307)

1. Receive color-bar signal.
2. N. D. C. ..... Blue ON state  
PICTURE button ..... MIN  
BRIGHTNESS ..... 50% (restting)
3. Watch the potential at pin 5 (G. DC) and pin 8 (B. DC) of NM301 to the pedestal at pin 15 (R. DC-1) of NM301 with RV305 and RV306, and adjust so that the input level off-set becomes disappear.
4. Apply 6.0 V DC to pin 1 (SUB BRT) of A-16 connector, and adjust the pedestal levels pin 15 (R. DC-1) and pin 16 (R. DC-2) of NM301 so as to they become the same level with RV307.
5. Switch the New. Dynamic Color at green and red, and confirm that there have been no differences in adjustments.

#### MPX LEVEL ADJUSTMENT (RV201)

1. Receive 400 Hz (100% modulation) sound signal.
2. Connect an RMS meter to pin 2 of MM201.
3. Adjust RV201 so that the MPX level is  $247.5 \pm 7.0$  mVrms.



#### SUB VOL ADJUSTMENT (RV101)

1. Receive 1.0 kHz (230 mVrms) sound signal.
2. VOLUME button ..... MAX
3. Adjust RV101 (SUB VOL) so that the pin 10 and pin 17 of IC802 output level is  $700 \pm 50$  mVrms.
4. At this time, confirm the speaker output level (pin 1 of A-11 connector and pin 1 of A-10 connector) is above 7.40 Vrms.

#### INDICATOR POSITION ADJUSTMENT (T101)

1. Receive a color-bar signal.
2. PICTURE button ..... MAX  
BRIGHTNESS button ..... 50%
3. Adjust T101 as shown in Fig. 5-3.

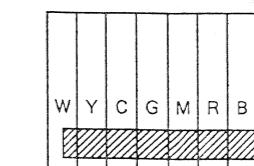
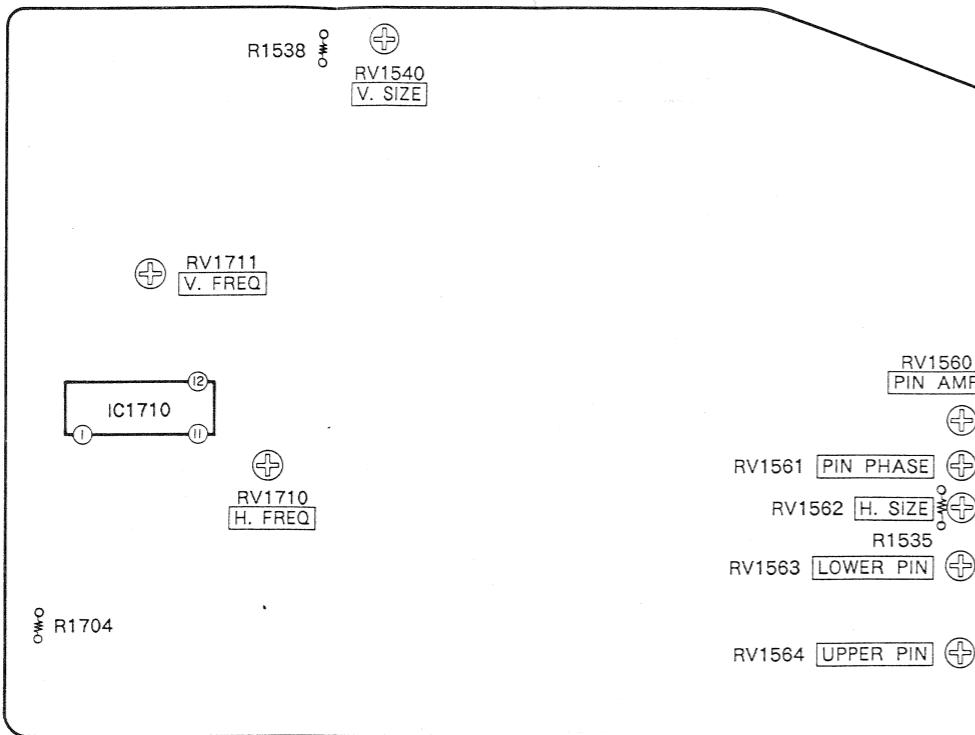


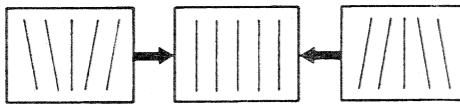
Fig. 5-3

## 5-2. D BOARD ADJUSTMENTS

D board -Component side-

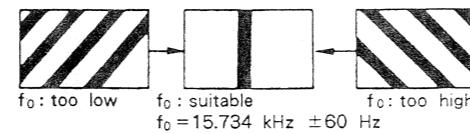


## PIN PHASE ADJUSTMENT (RV1561)



## H. FREQ ADJUSTMENT (RV1710)

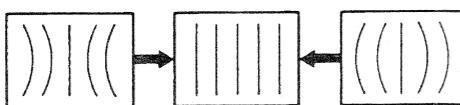
1. Connect pin ① of IC1710 to pin ⑪ through  $1.0\text{ k}\Omega$ . At this time, be sure to connect pin ③ of IC302 on the A board to 12 V through  $10\text{ k}\Omega$ .
2. Turn the horizontal synchronizing volume (RV1710), and adjust the volume so as to flow of the picture becomes as shown in diagram.
3. Remove the  $1.0\text{ k}\Omega$  resistor and be sure to confirm the horizontal synchronization is normal and whether picture becomes out of order when channel is switched or not.



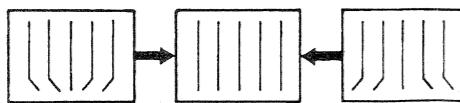
## V. FREQ ADJUSTMENT (RV1711)

1. VIDEO Mode (no-signal).
2. Connect frequency counter across pin ⑫ of IC1710 and ground.
3. Adjust RV1711 for  $55.0 \pm 0.5\text{ Hz}$  on the frequency counter.

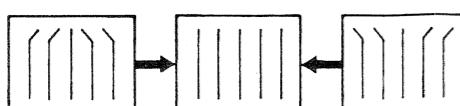
## PIN AMP ADJUSTMENT (RV1560)



## LOWER PIN ADJUSTMENT (RV1563)



## UPPER PIN ADJUSTMENT (RV1564)

PICTURE BLANKING CONFIRMATION  
(US. Model Only)

The following adjustments should always be performed when replacing the following components.  
Regarding components of  $\approx R1704$ .

IC301, PM1700, D1543, R1552, R1704, R1705, R1713, R1716, R1637, R1700, R339, R340

1. Turn the POWER switch ON, and receive monoscope signal.
2. Set the PICTURE button into 80% and the BRIGHTNESS button into DETENT.
3. Apply DC voltage  $16.00 \pm 0.00$  to the TP85 via 1T40 from the DC stabilized power source.
4. Confirm that the picture is blanked till +B voltage is more than 121.0 V DC.
5. Confirm that the picture is not blanked when INPUT voltage is more than 96 V AC.

## V. SIZE CONFIRMATION

The following adjustments should always be performed when replacing the following components.  
Regarding components of  $\approx R1538$  (V. SIZE).

DY, C1539, C1548, IC1710, T1701, RV1540, R1538, R1539, R1546, R1671, R1672, R1732

1. Turn the POWER switch ON, and receive monoscope signal.
2. Set the PICTURE button into 80% and the BRIGHTNESS button into DETENT.
3. Adjust RV1540 (V.SIZE) so that the V.SIZE becomes minimum, and confirm that the raster size is 275 cm or more.

## H. SIZE CONFIRMATION

The following adjustments should always be performed when replacing the following components.  
Regarding components of  $\approx R1535$  (H. SIZE).

DY, RV1562, T1701, C1506, C1507, C1509, C1510, R1535, R1577, R1570, R1576

1. Turn the POWER switch ON, and receive monoscope signal.
2. Set the PICTURE button into 80% and the BRIGHTNESS button into DETENT.
3. Confirm that the H.SIZE at minimum should not exceed 16.9 frames by adjusting RV1562 (H. SIZE).

**SECTION 6**  
**DIAGRAMS**

**KV-27SXR10**  
RM-755

**KV-27SXR10**  
RM-755



[CUSTOMER  
CONTROL]



[POWER CONTROL  
LED DISPLAY]



[DETECTOR]



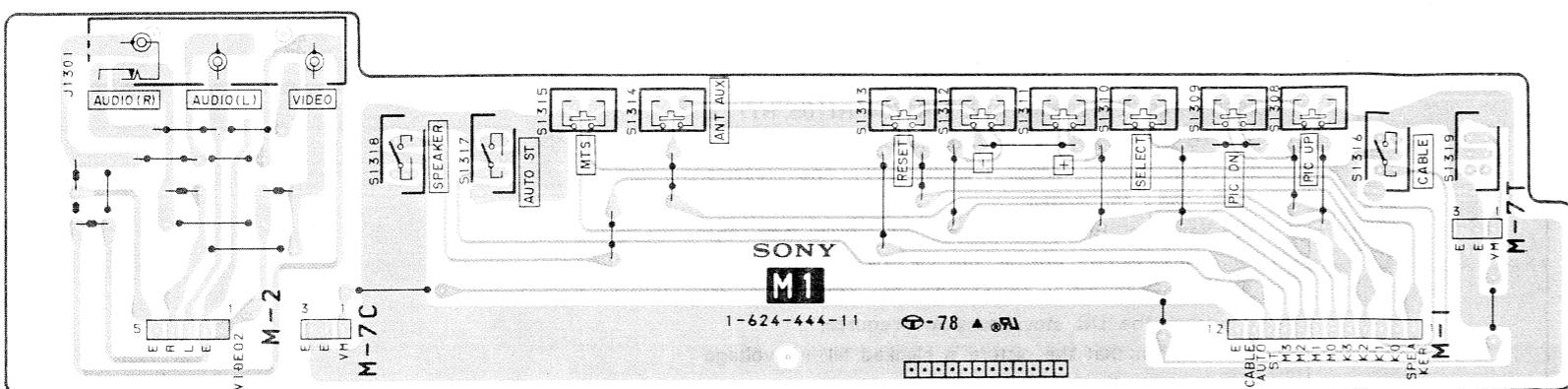
[ANT 9W]



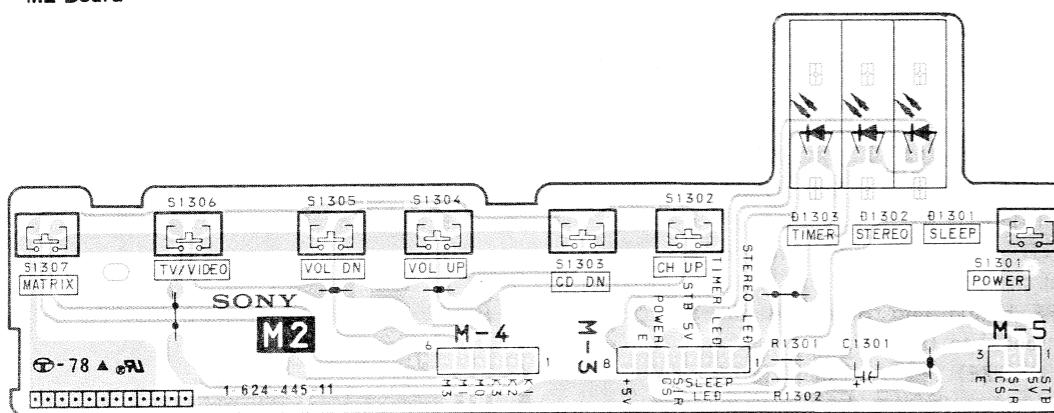
TUNER BAND SW, VIF, SIF  
Y CHROMA, AUDIO OUT  
PLL CONTROLLER

**6-1. PRINTED WIRING BOARDS** — Conductor Side —

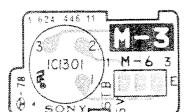
— M1 Board —



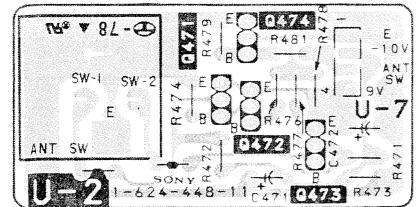
— M2 Board —



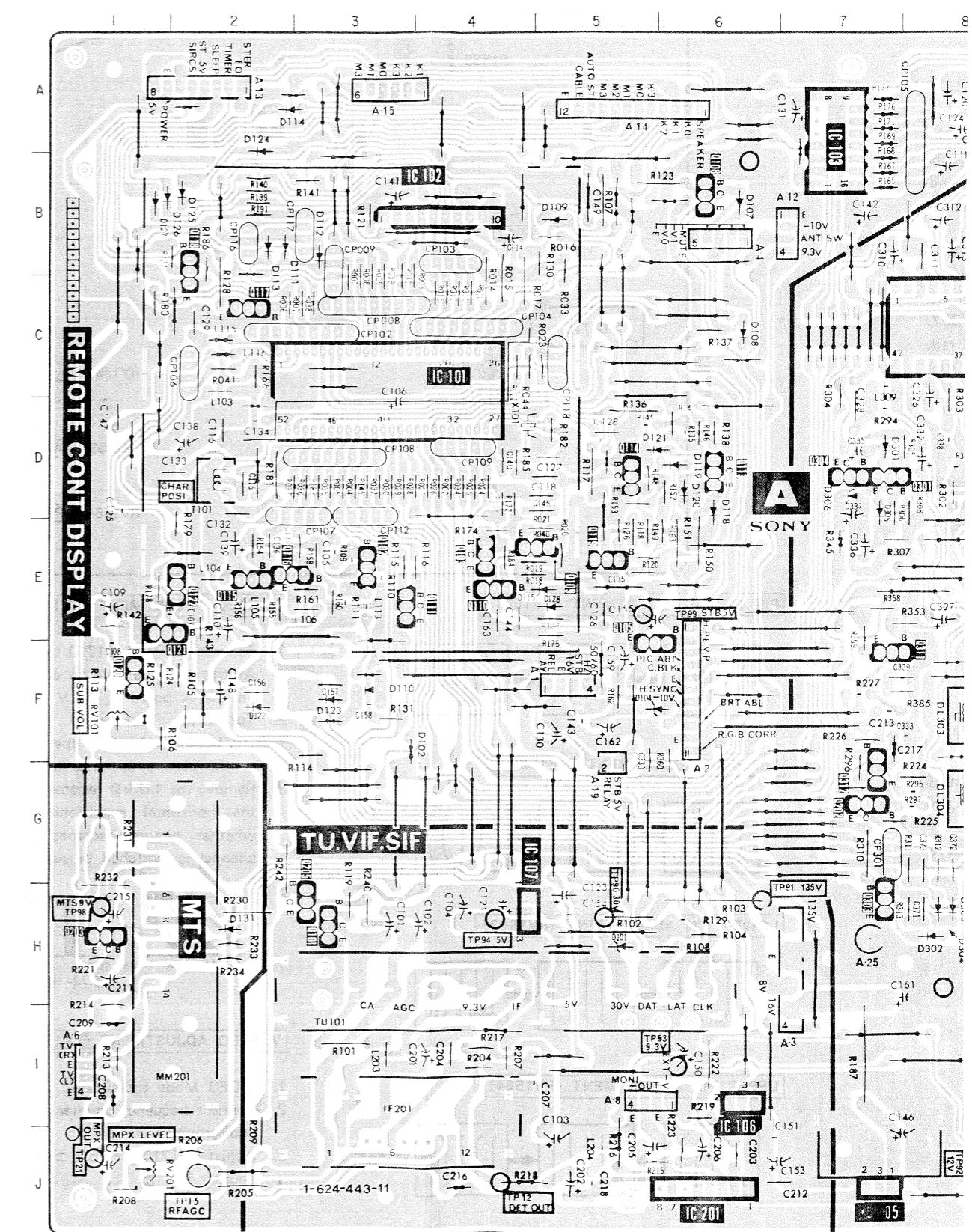
— M3 Board —

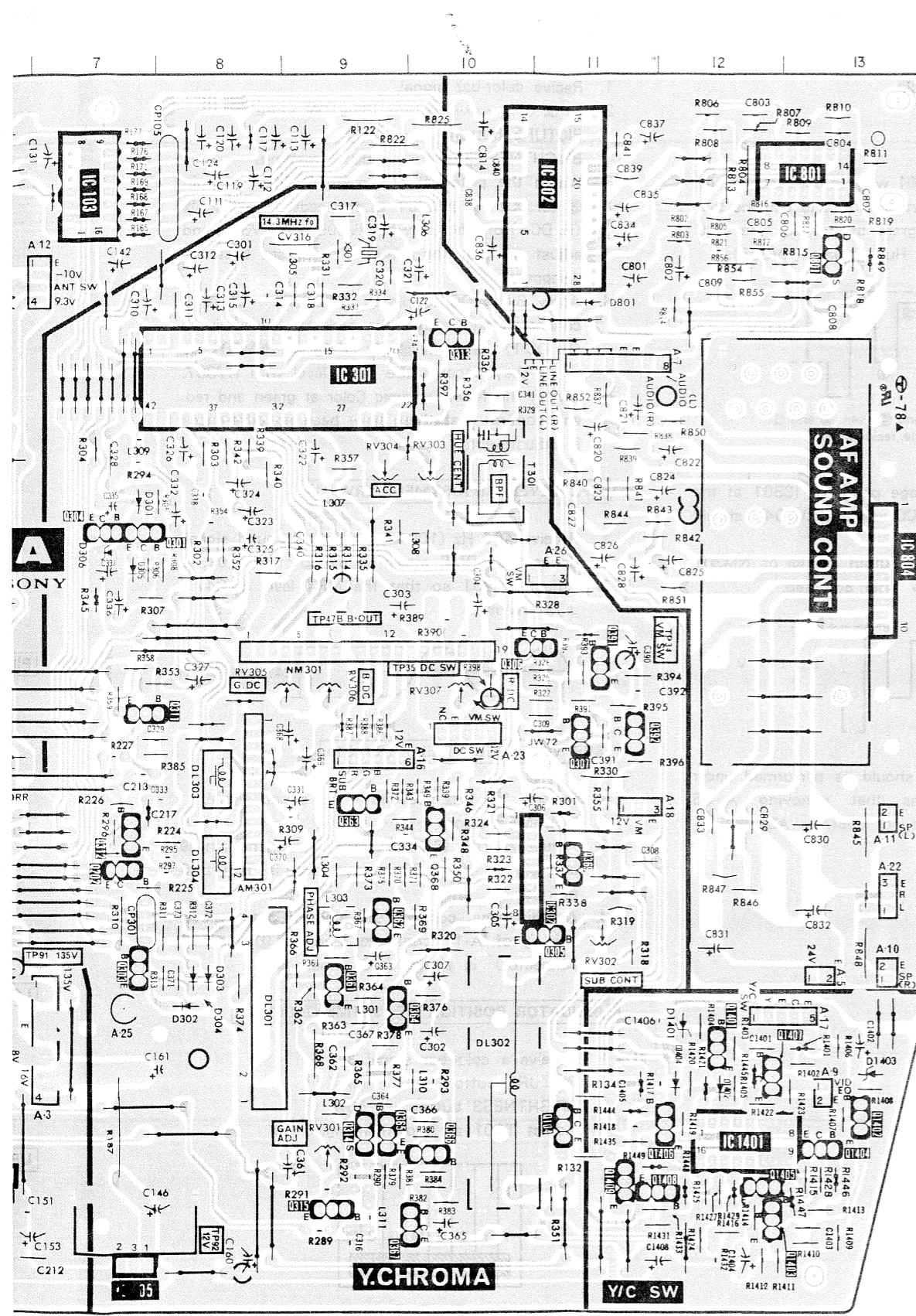
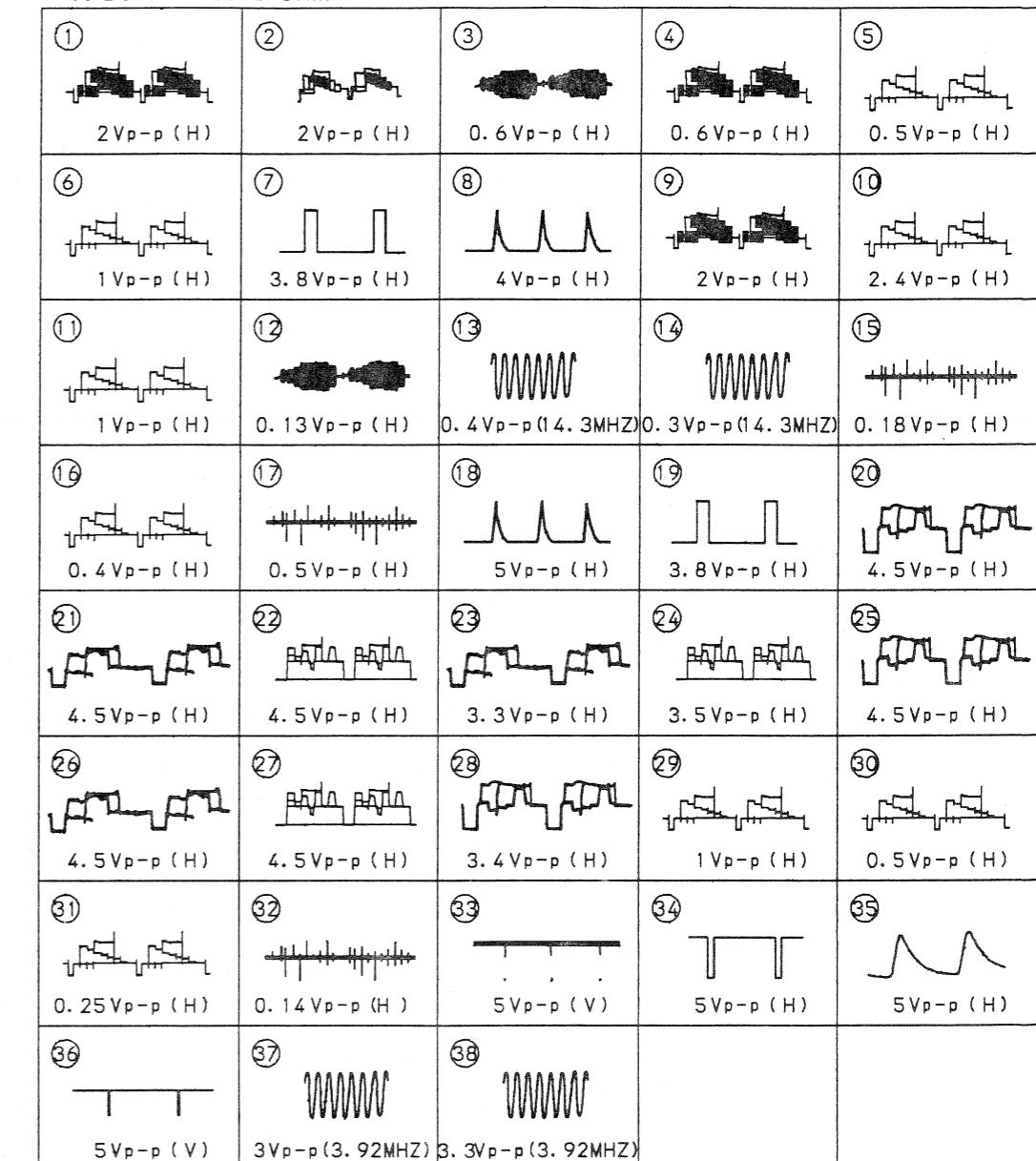


— U2 Board —

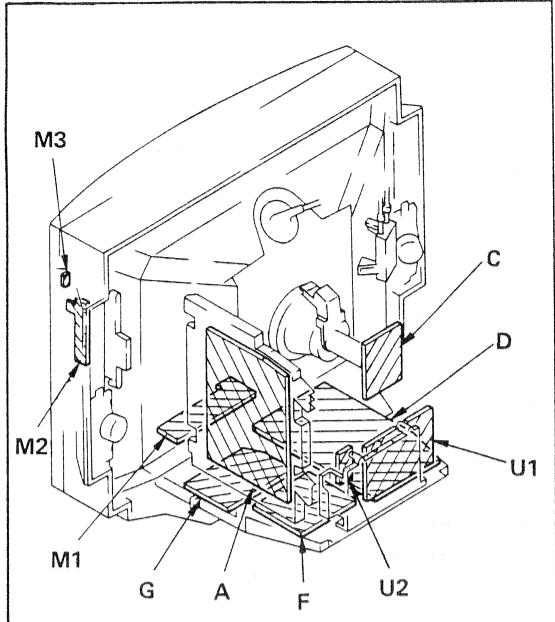


— A Board —

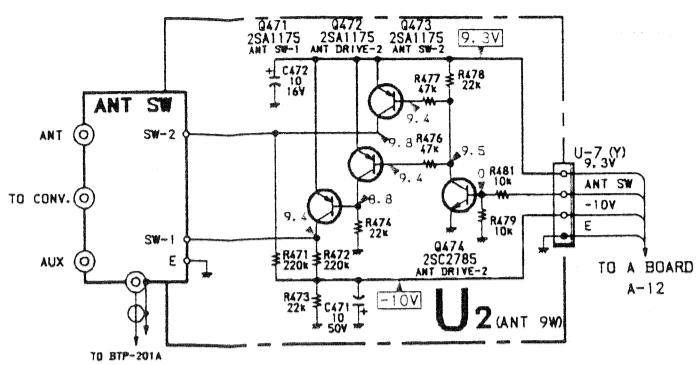


**A BOARD****A BOARD WAVEFORM**

## 6-2. CIRCUIT BOARDS LOCATION



## 6-3. SCHEMATIC DIAGRAMS



- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  
 $\mu\text{F}$ :  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics.
- All resistors are in ohms.
- Indication of resistance, which does not have one for rating electrical power is as follows.

Pitch : 5 mm  
Rating electrical power 1/4W

- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by , make the necessary adjustments indicated. If results do not meet the specified value, change the component identified by and repeat the adjustment until the specified value is achieved.
- When replacing the part in below table be sure to perform the related adjustment.

IC1710, PM1700, R1700, R1703, R1707, R1713, R1716	R1707 (HOLD-DOWN OPERATION)
---	--------------------------------

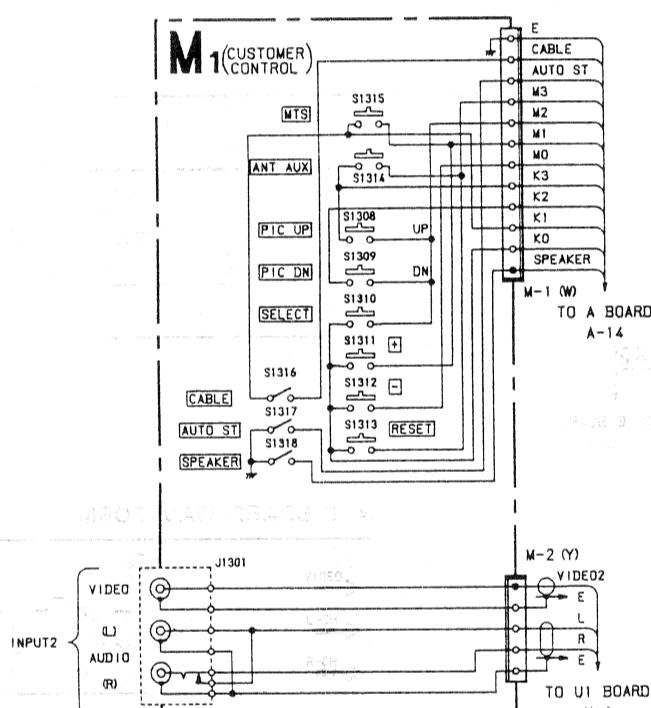
- All voltages are in V.
- Voltage are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 MΩ digital multimeter.
- : adjustment for repair.
- Readings are taken with a color-bar signal input.
- The hold down checelpoint is TP85.
- : B+ bus.
- : B- bus.
- : signal pass.

## Reference information

RESISTOR	: RN METAL FILM
	: RC SOLID
	: FPRD NONFLAMMABLE CARBON
	: FUSE NONFLAMMABLE FUSIBLE
	: RS NONFLAMMABLE WIREWOUND
	: RB NONFLAMMABLE CEMENT
COIL	: LF-8L MICRO INDUCTOIR
CAPACITOR	: TA TANTALUM
	: PS STYROL
	: PP POLYPROPYLENE
	: PT MYLAR
	: MPS METALIZED POLYESTER
	: MPP METALIZED-PORYPROPYLENE
	: ALB BIPOLAR
	: ALT HIGH-TEMPERATURE
	: ALR HIGH RIPPLE

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



INPUT2

J1301

VIDEO E

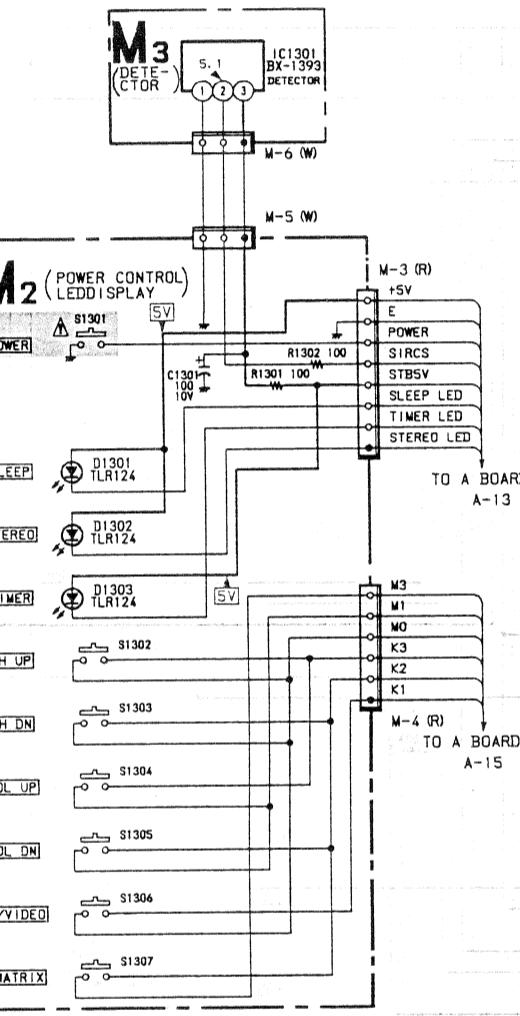
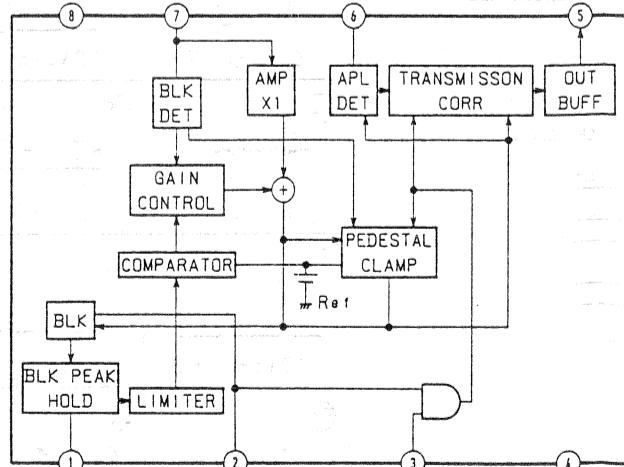
AUDIO L

R

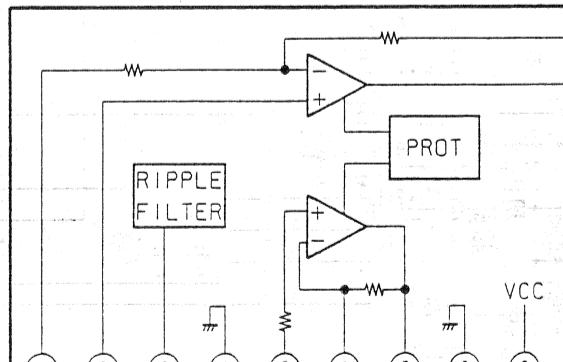
RCA

TO U1 BOARD U-6

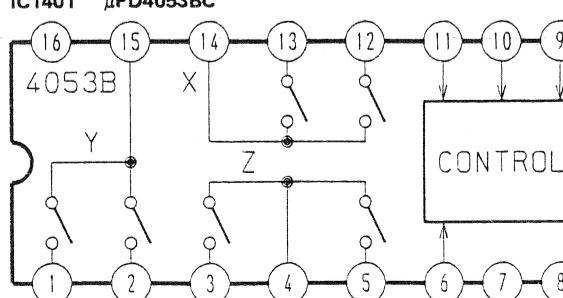
## IC302 CX20125



## IC804 LA4270



## IC1401 μPD4053BC



11

12

13

14

15

16

17

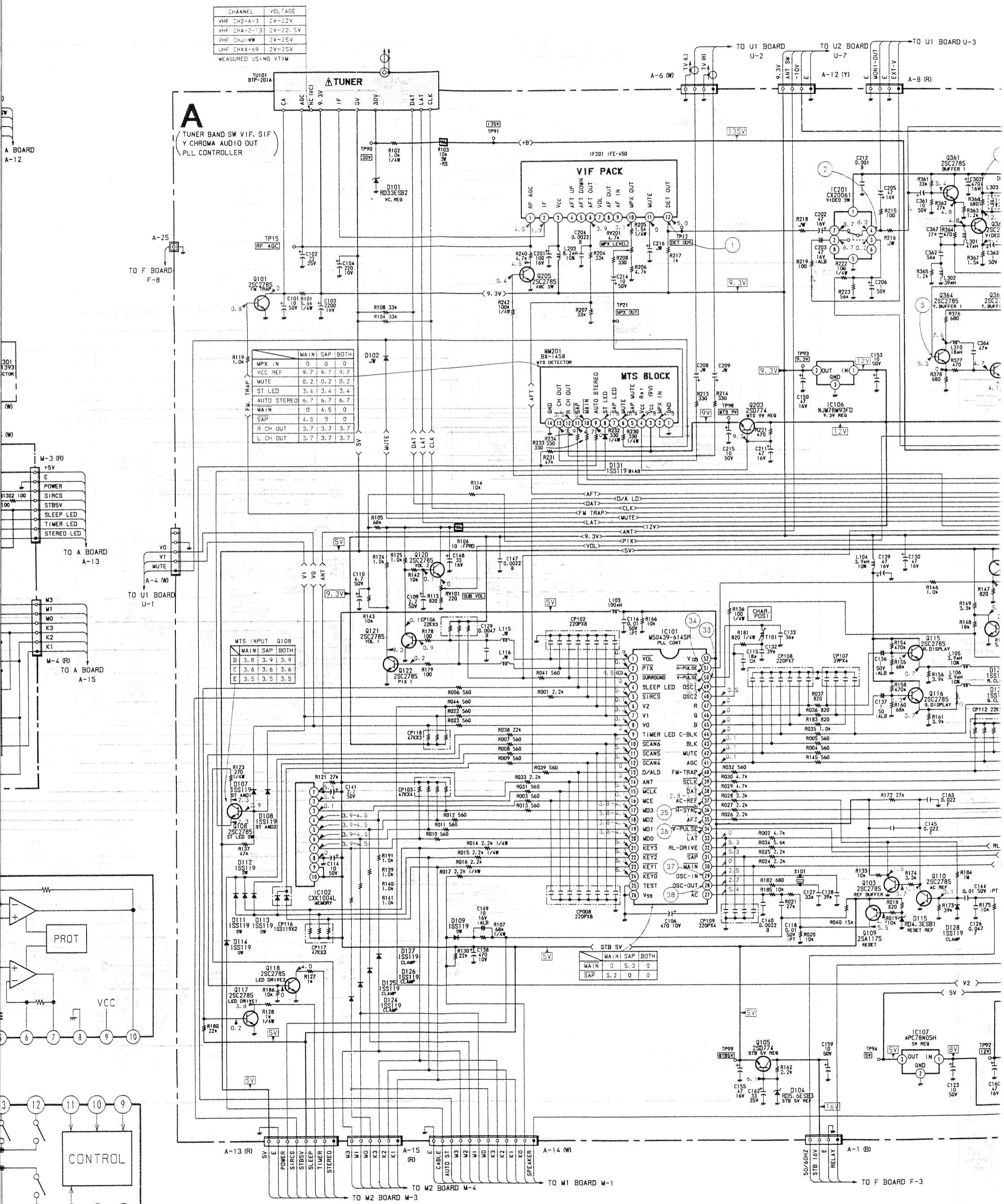
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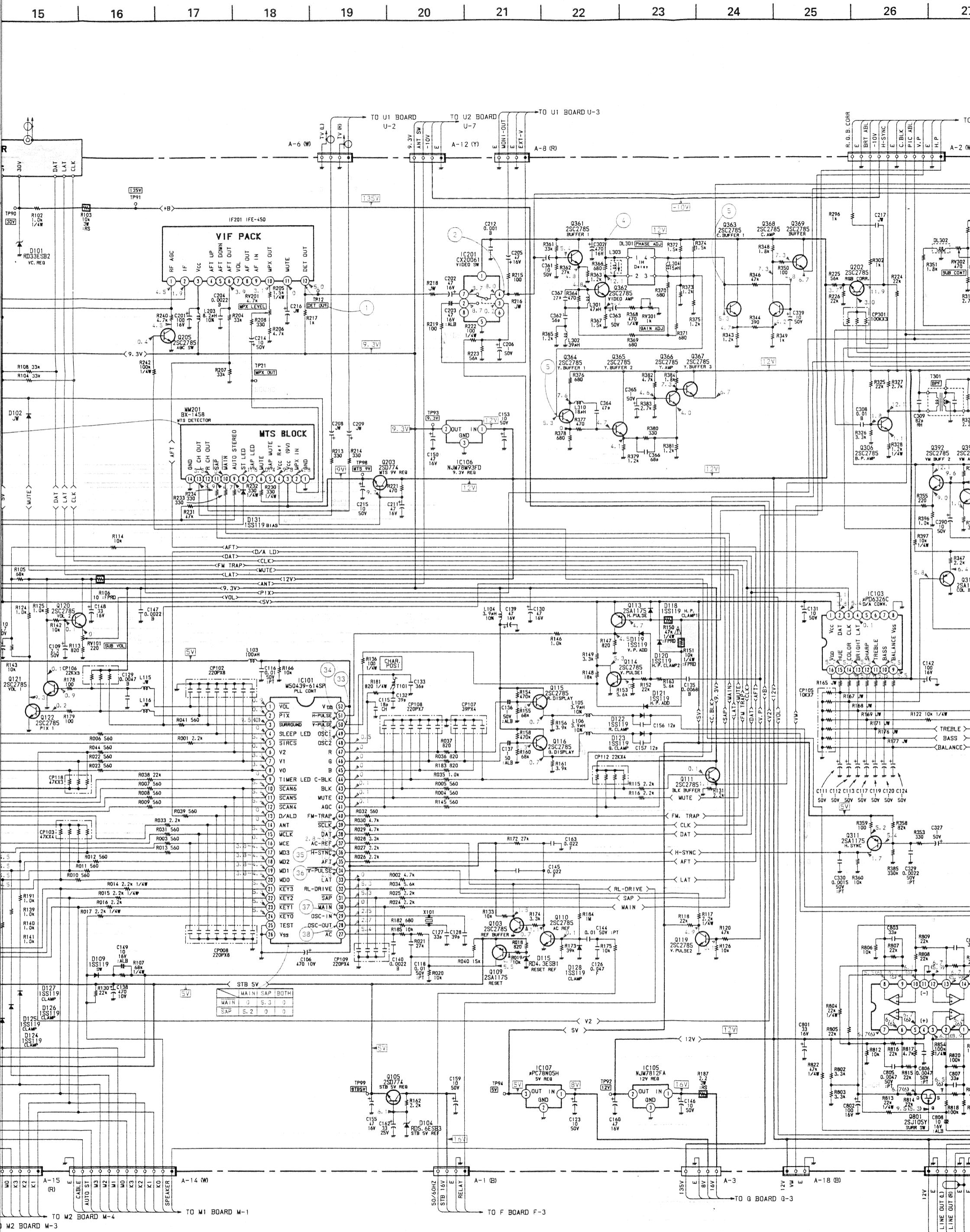
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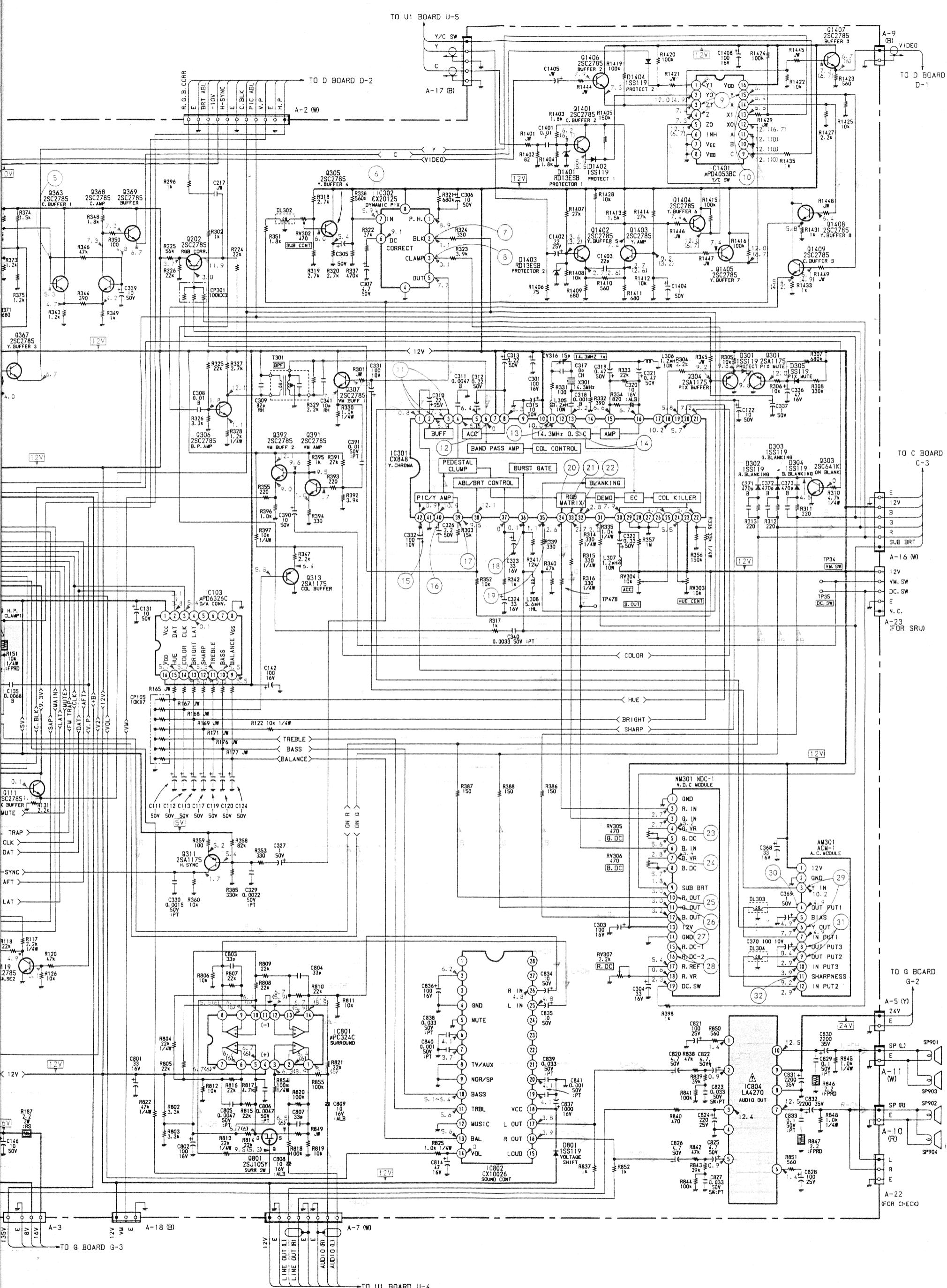
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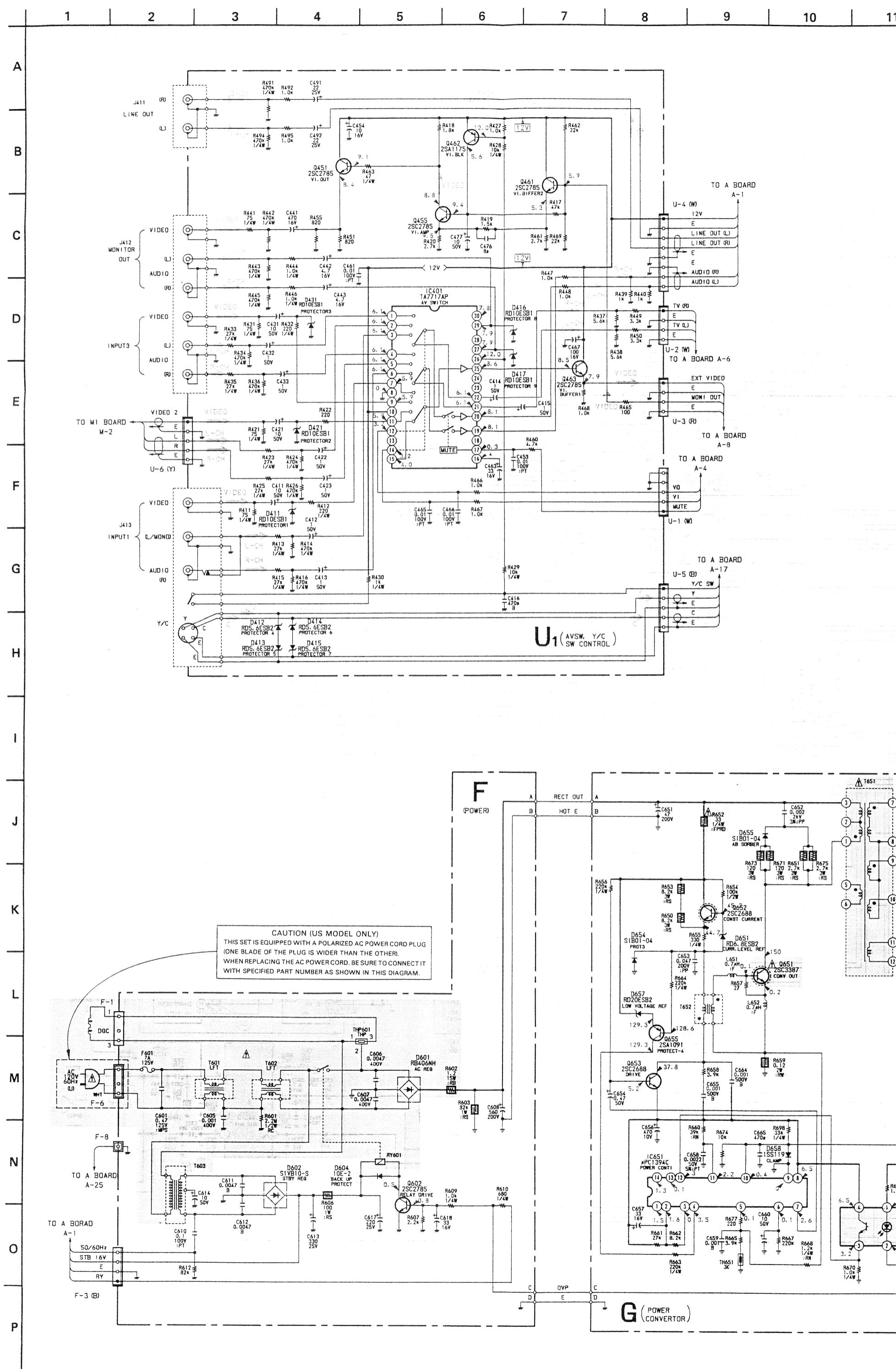
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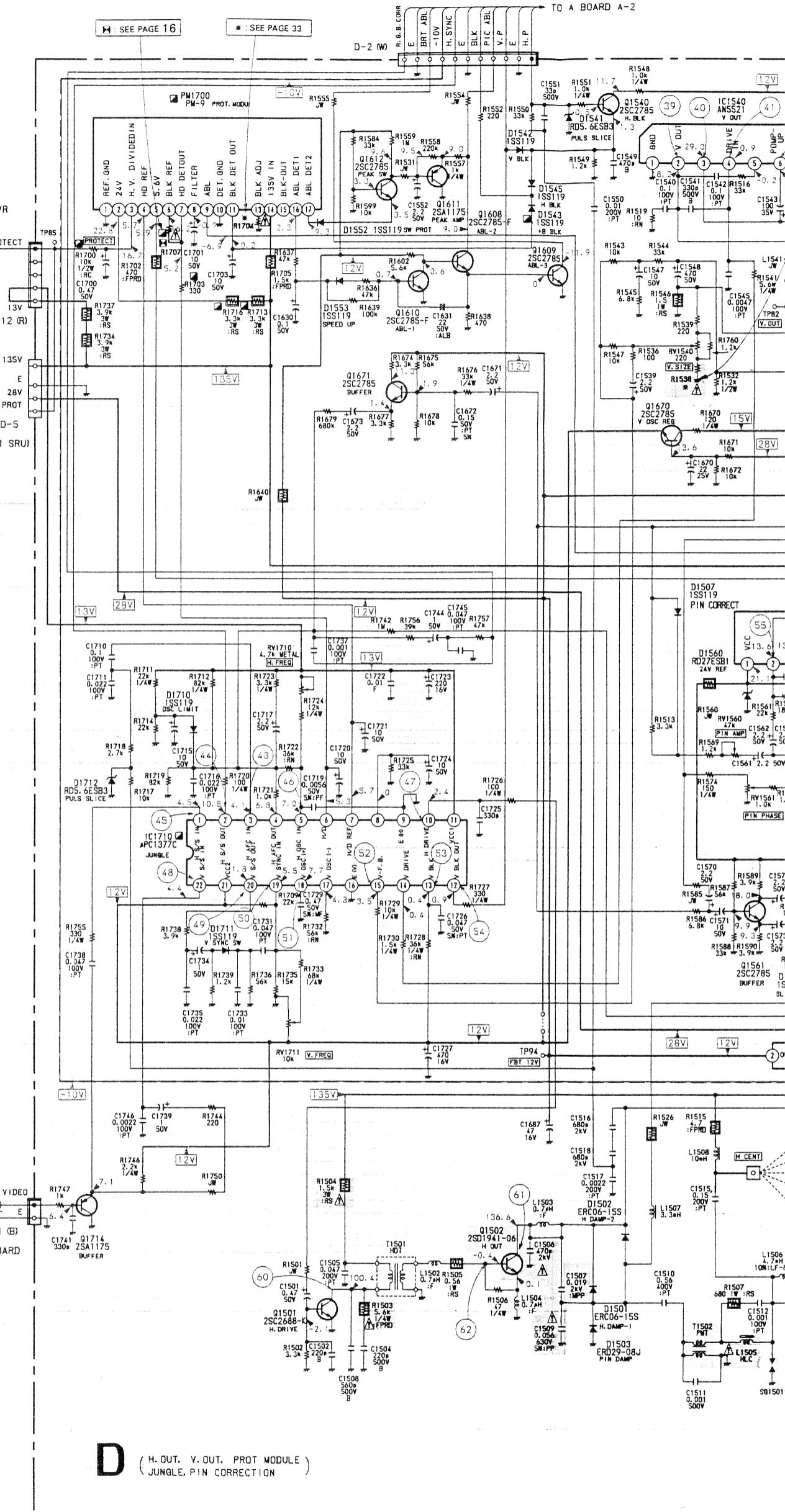
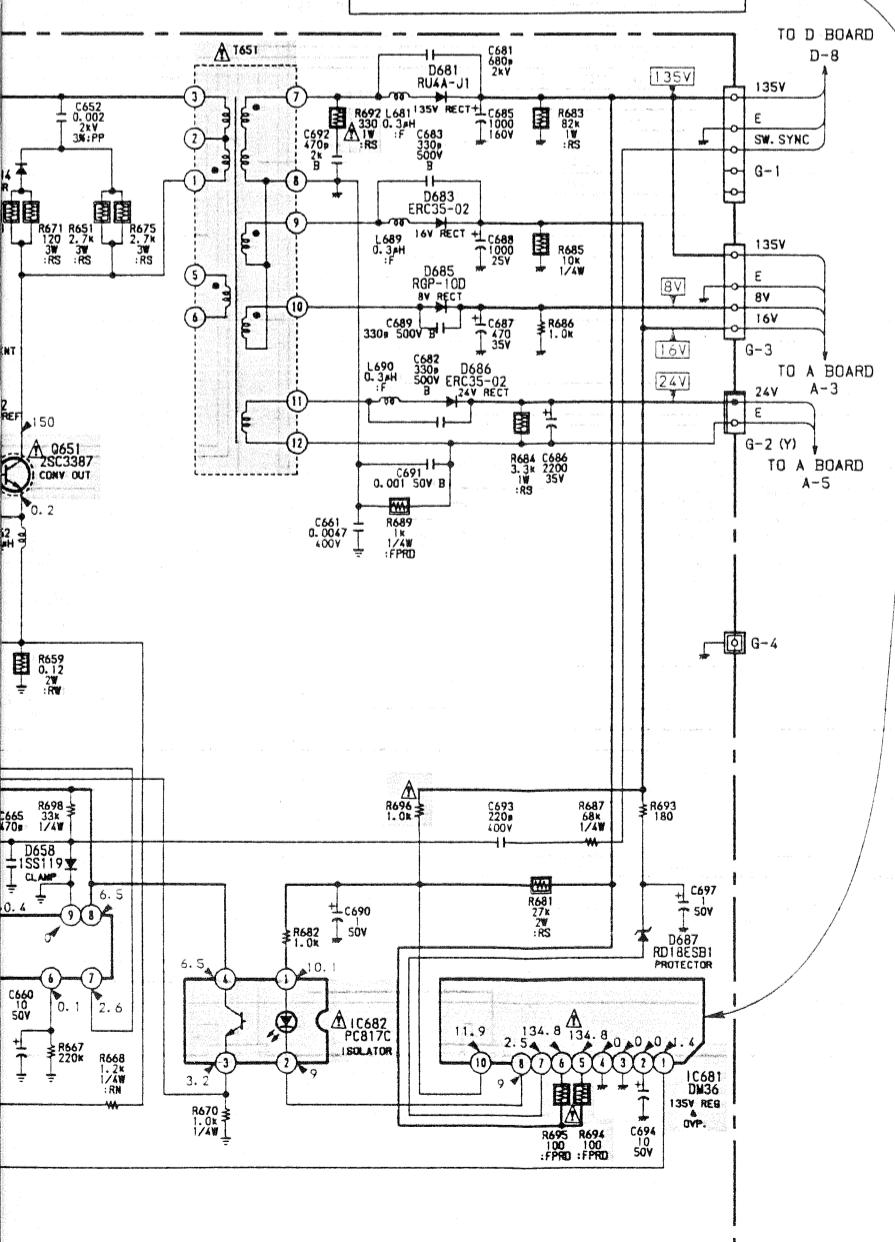


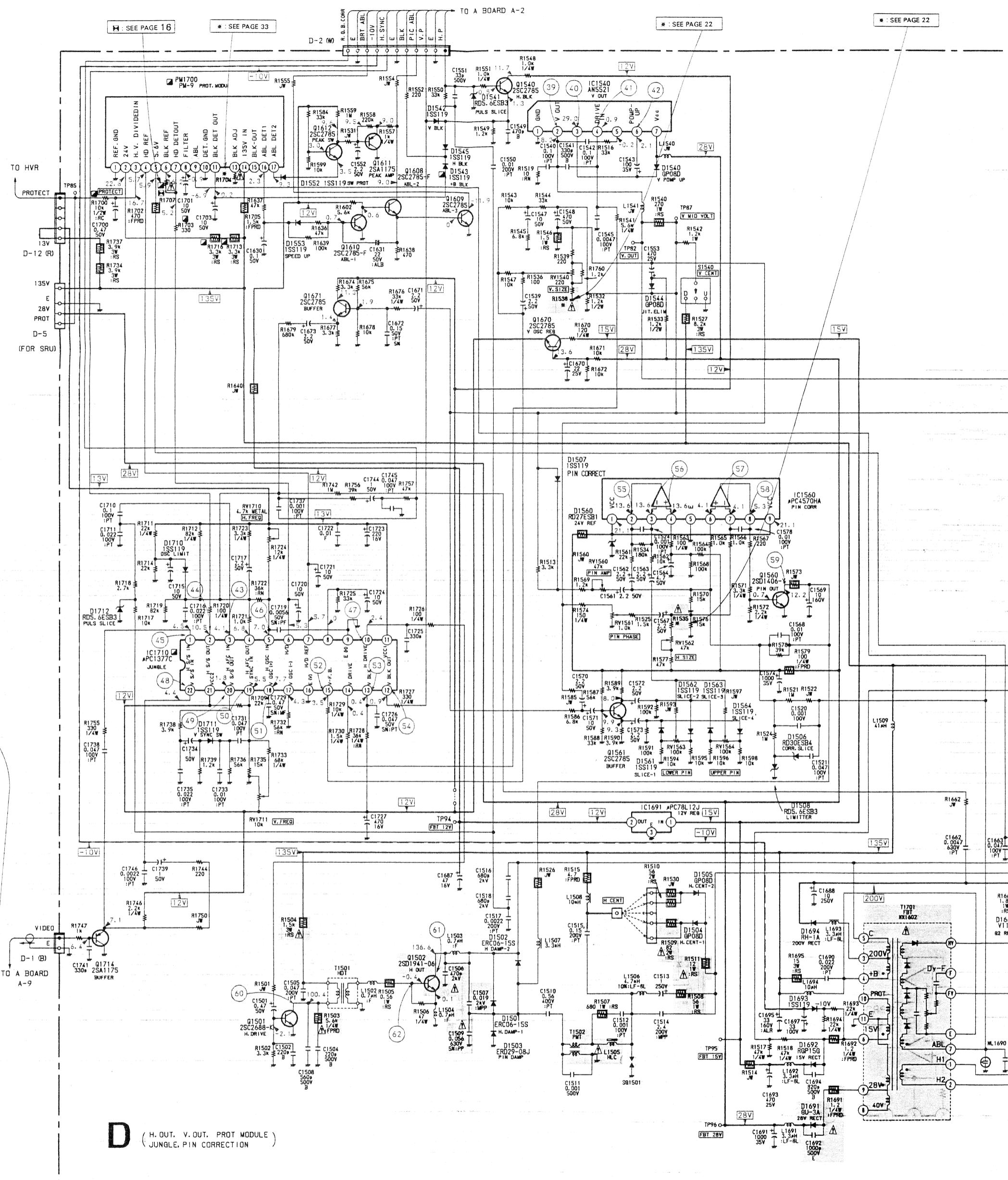






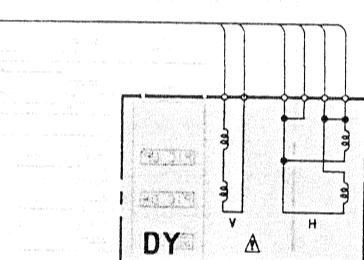
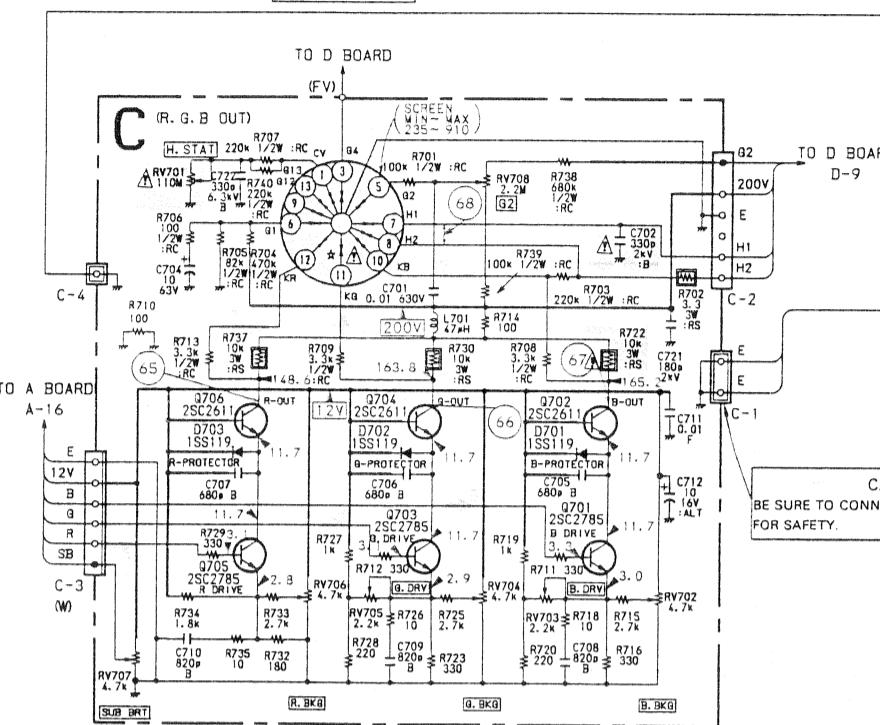
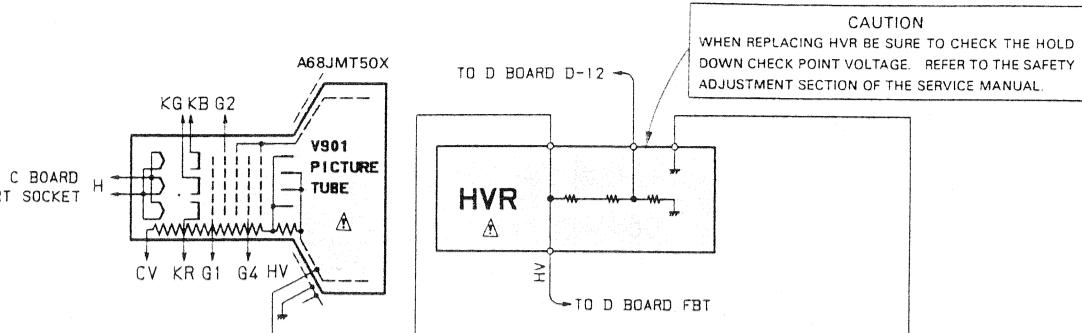
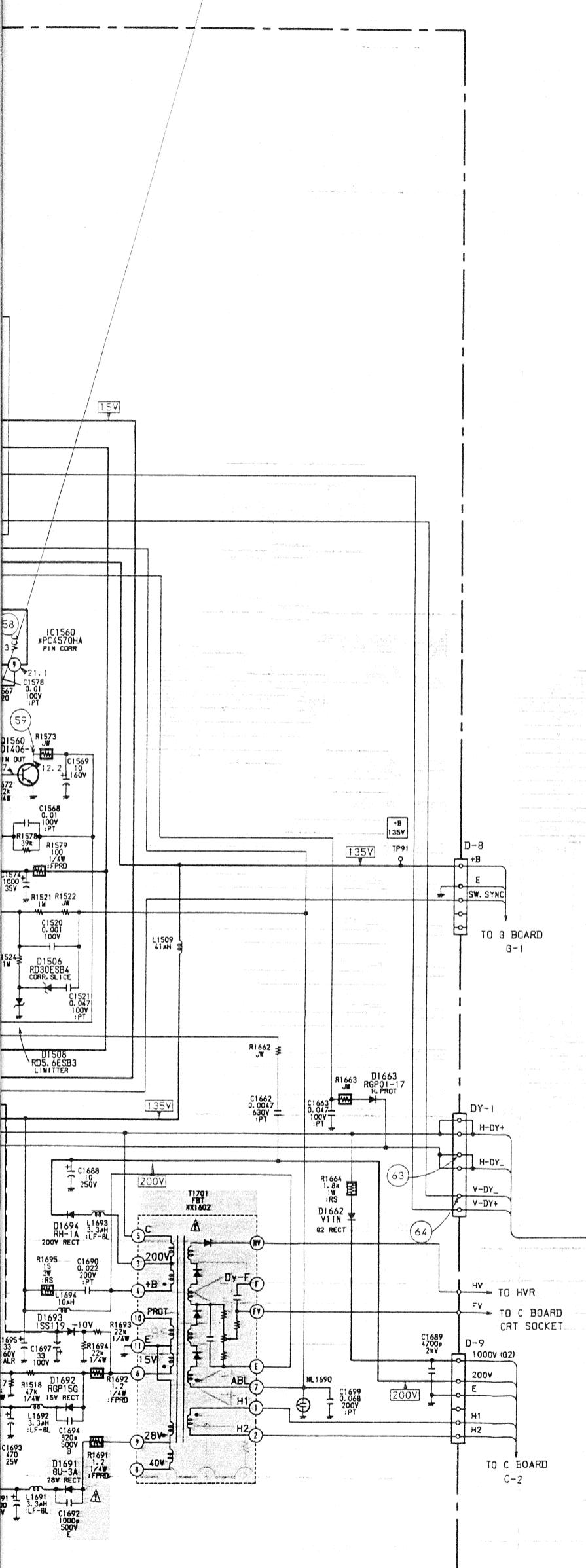
**CAUTION**  
WHEN REPLACING IC681, BE SURE TO CHECK THE TEST POINT VOLTAGE VALUE (TP91). REFER TO THE SAFETY ADJUSTMENT SECTION.



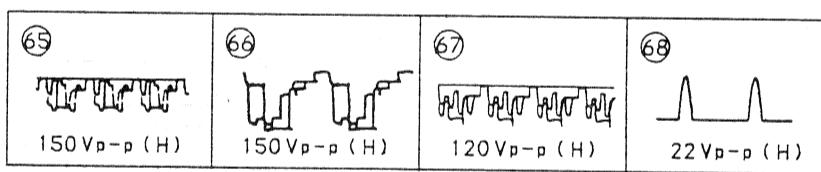


**D** ( H. OUT. V. OUT. PROT MODULE )  
JUNGLE, PIN CORRECTION )

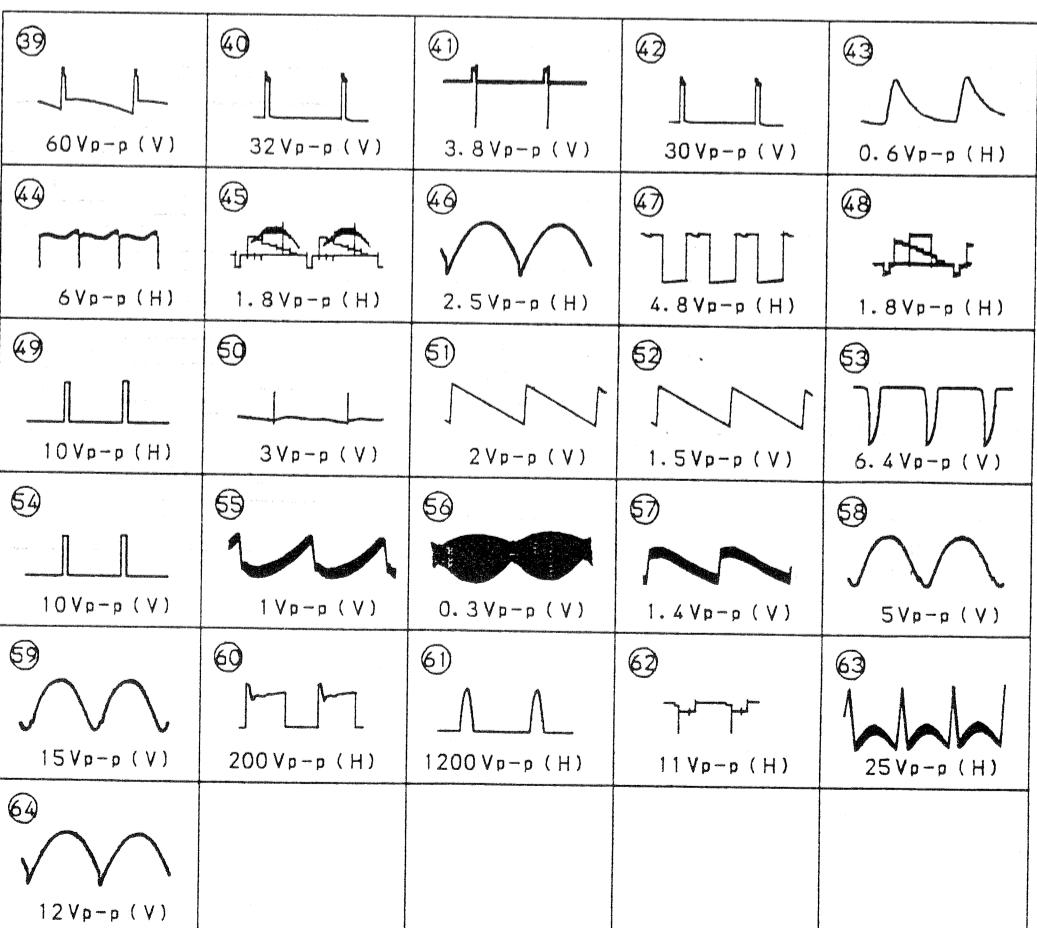
\* : SEE PAGE 22



- C BOARD WAVEFORM

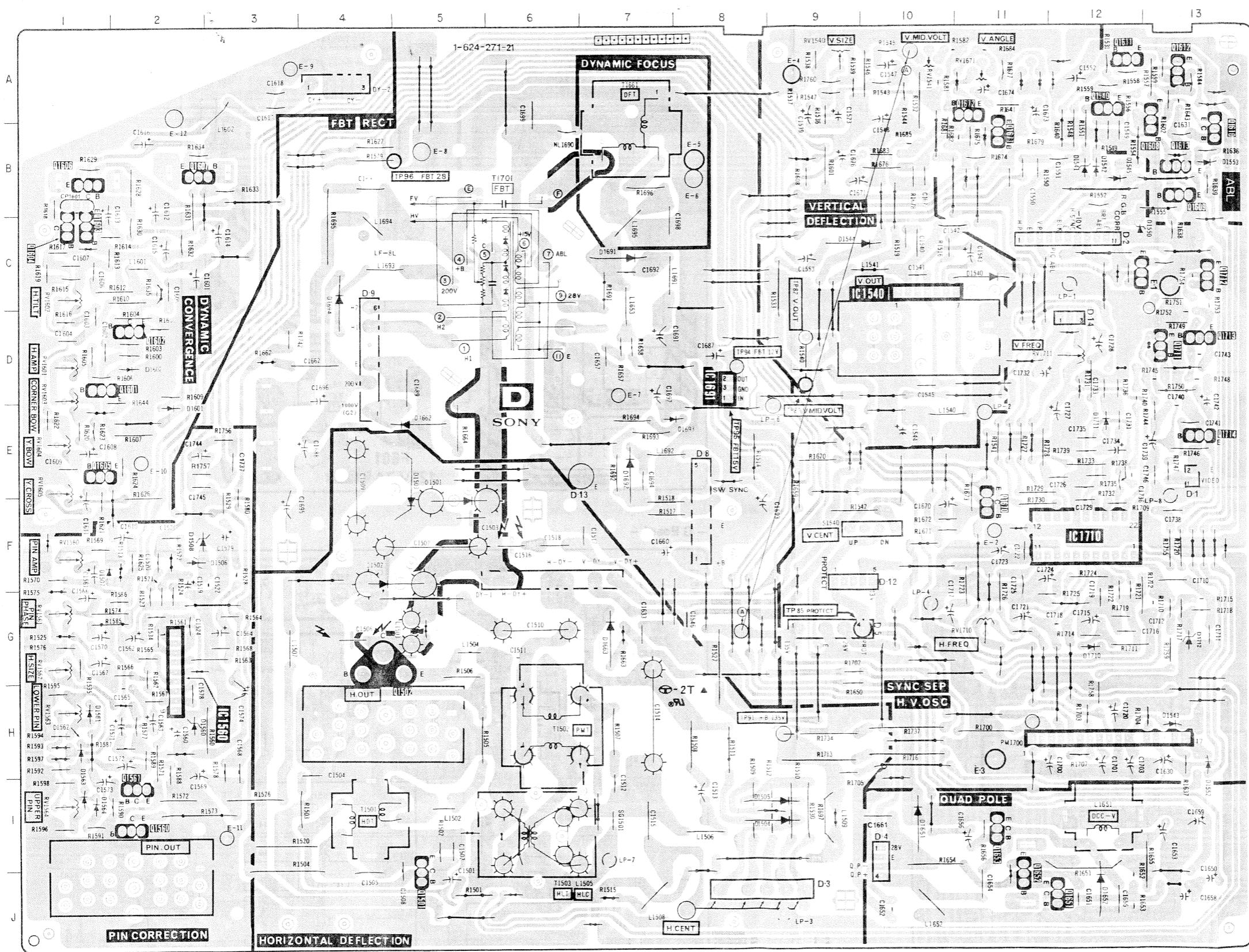


- D BOARD WAVEFORM



**D** [H. OUT, V. OUT, PROT MODULE  
JUNGLE, PIN CORRECTION]

— D Board — — Conductor Side —



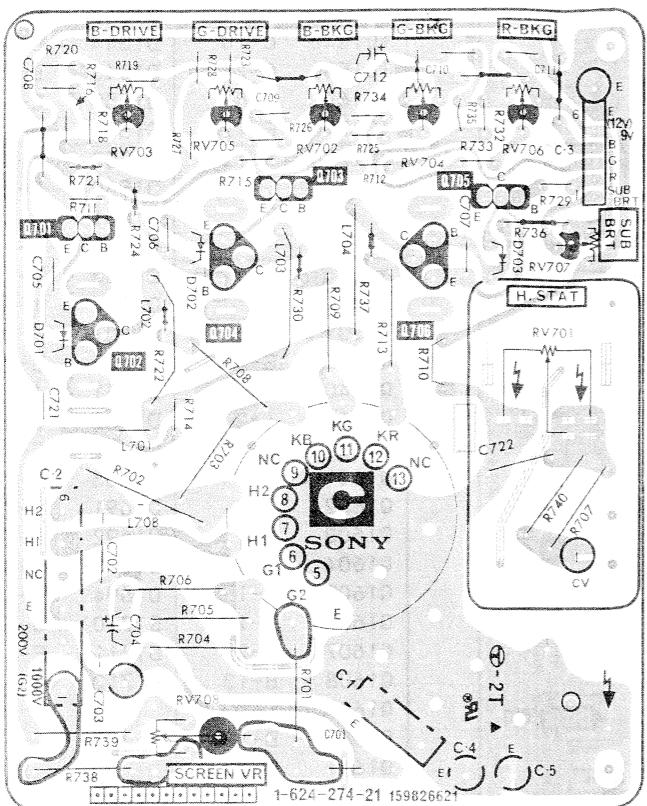
<b>IC</b>	
IC1540	C-10
IC1560	G-2
IC1691	D-8
IC1710	F-12
PM1700	H-12
<b>TRANSISTOR</b>	
Q1501	J-5
Q1502	G-4
Q1540	A-12
Q1560	I-2
Q1561	I-2
Q1601	D-1
Q1602	D-2
Q1603	C-1
Q1604	C-1
Q1605	E-1
Q1606	B-1
Q1607	B-2
Q1608	B-13
Q1609	B-13
Q1610	B-13
Q1611	A-12
Q1612	A-13
Q1613	B-13
Q1651	J-12
Q1652	J-11
Q1653	I-11
Q1670	F-11
Q1671	B-11
Q1672	A-11
Q1711	D-13
Q1712	C-13
Q1713	D-13
Q1714	E-13
<b>VARIABLE RESISTOR</b>	
RV1540	A-9
RV1541	A-10
RV1560	F-1
RV1561	G-1
RV1562	H-1
RV1563	I-1
RV1564	D-1
RV1601	C-1
RV1602	D-1
RV1603	D-1
RV1604	E-1
RV1605	E-1
RV1671	A-11
RV1710	G-11
RV1711	D-12
<b>DIODE</b>	
D1501	F-5
D1502	F-4
D1503	F-5
D1504	I-9
D1505	I-9
D1506	F-2
D1507	F-1
D1508	F-2
D1540	C-11
D1541	B-12

**C** [B:G:B OUT]

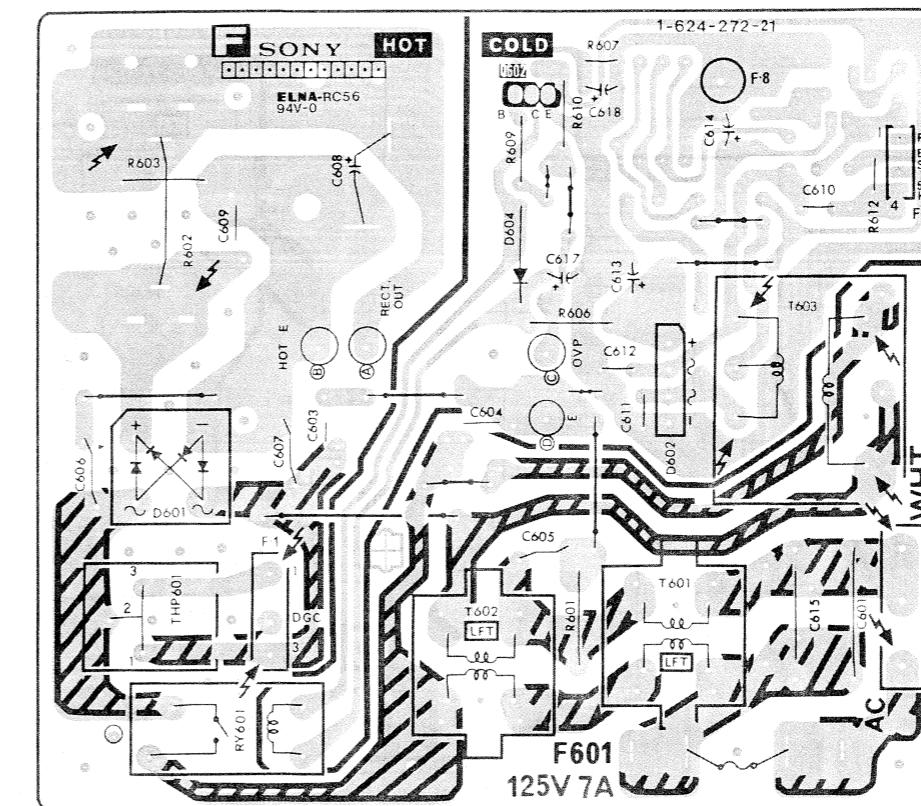
**U1** [AVSW, Y/C  
SW CONTROL]

**F** [POWER] **G** [POWER CONVERTER]

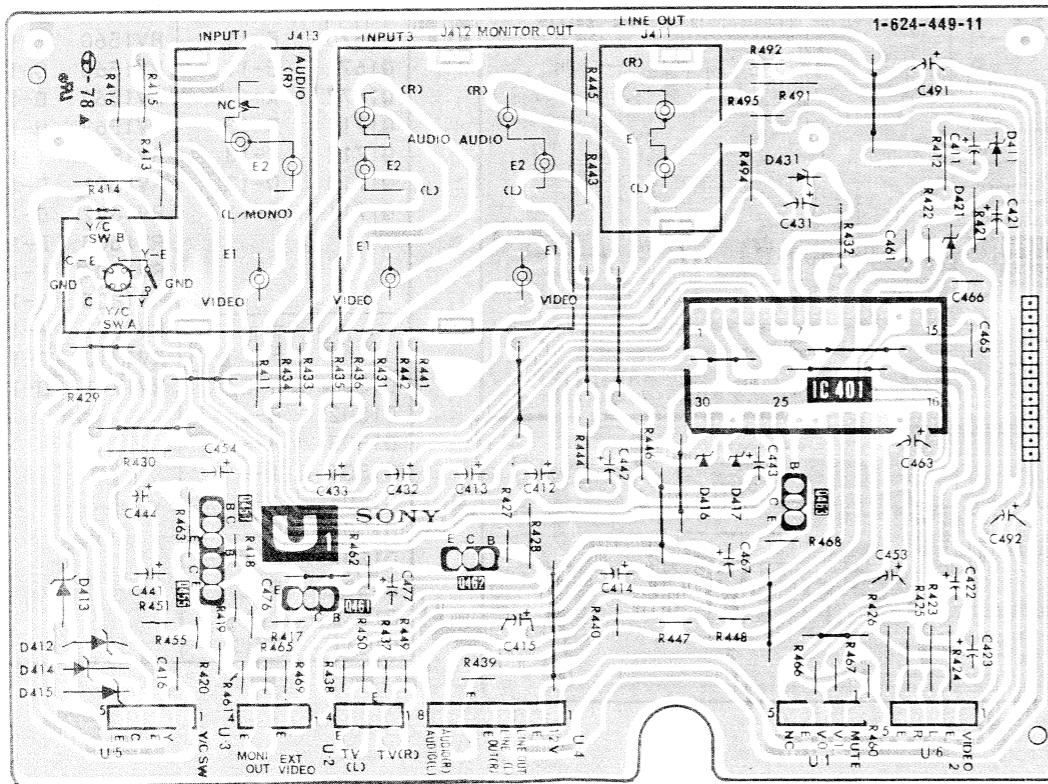
- C Board -



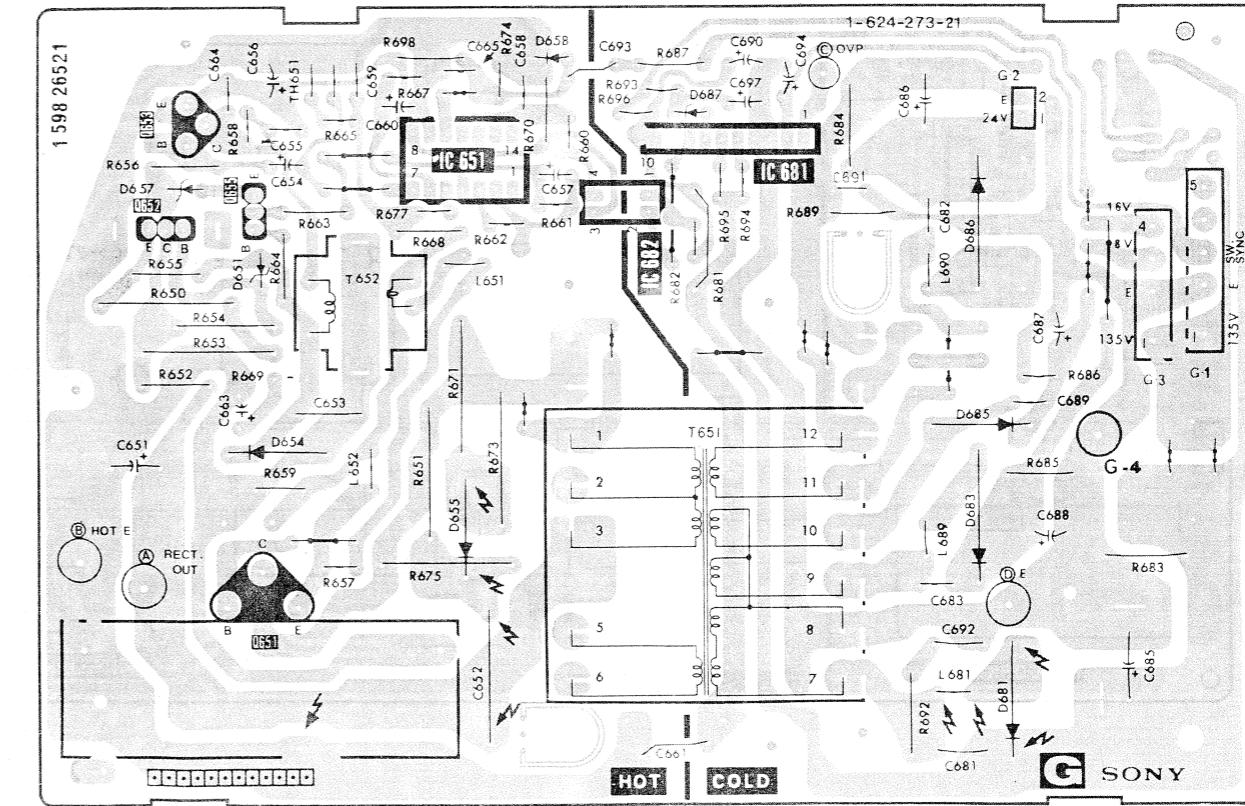
– F Board



- U1 Board -

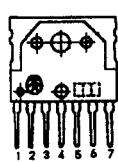


– G Board



**6-4. SEMICONDUCTORS**

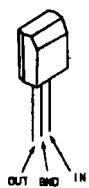
AN5521



M50439-614SP



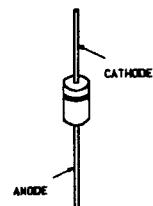
$\mu$ PC78L12J



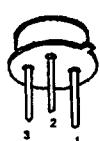
2SC2958  
2SD774



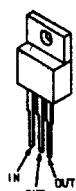
ERC06-15S  
ERC24-06S  
GP08D  
RH-1A  
S1B01-02  
S1B01-04



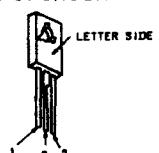
BX-1393



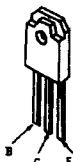
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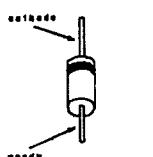
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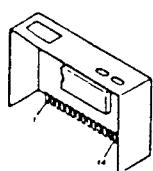
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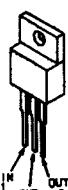
ERC35-02  
ERD29-08J  
RU-4A-J1  
RU-4DS



BX-1458



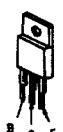
NJM78M93FD



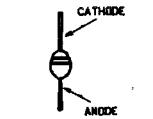
$\mu$ PD4053BD  
 $\mu$ PD6326C

TOP VIEW

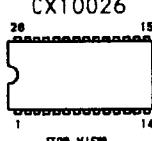
2SD1406



GU3A  
U05G  
V11N



CX10026



PC817C



2SA1048  
2SA1115  
2SA2458  
2SC2603



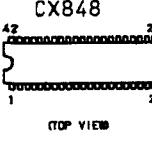
2SJ105



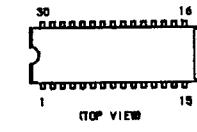
RB406NH



CX848



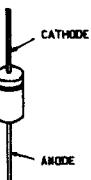
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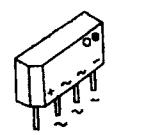
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2SC1740S  
2SC641K



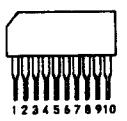
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ES-1F  
RD33E-B2  
RGP01-17  
RGP15G



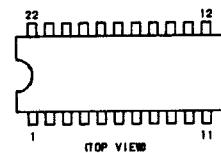
S1VB-10S  
S1VB-40



CXK-1004L



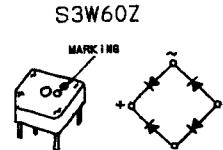
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2SA1175  
2SC2785



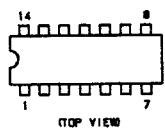
1SS119  
1SS133  
1SS148  
RD10ES-B1  
RD13ES-B  
RD18ES-B1  
RD20ES-B2  
RD24ES-B3  
RD33ES-B2  
RD33ES-B4  
RD4.3ES-B1  
RD5.6ES-B2  
RD5.6ES-B3  
RD6.8ES-B2



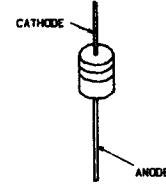
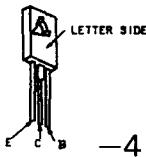
DM-36



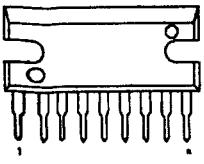
UPC1394C  
UPC324C



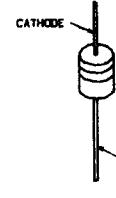
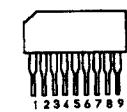
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2SB772  
2SC2611  
2SC2688  
2SC2690A  
2SD882



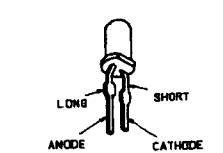
LA4270



$\mu$ PC4570HA



TLR124



## SECTION 7 EXPLODED VIEWS

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

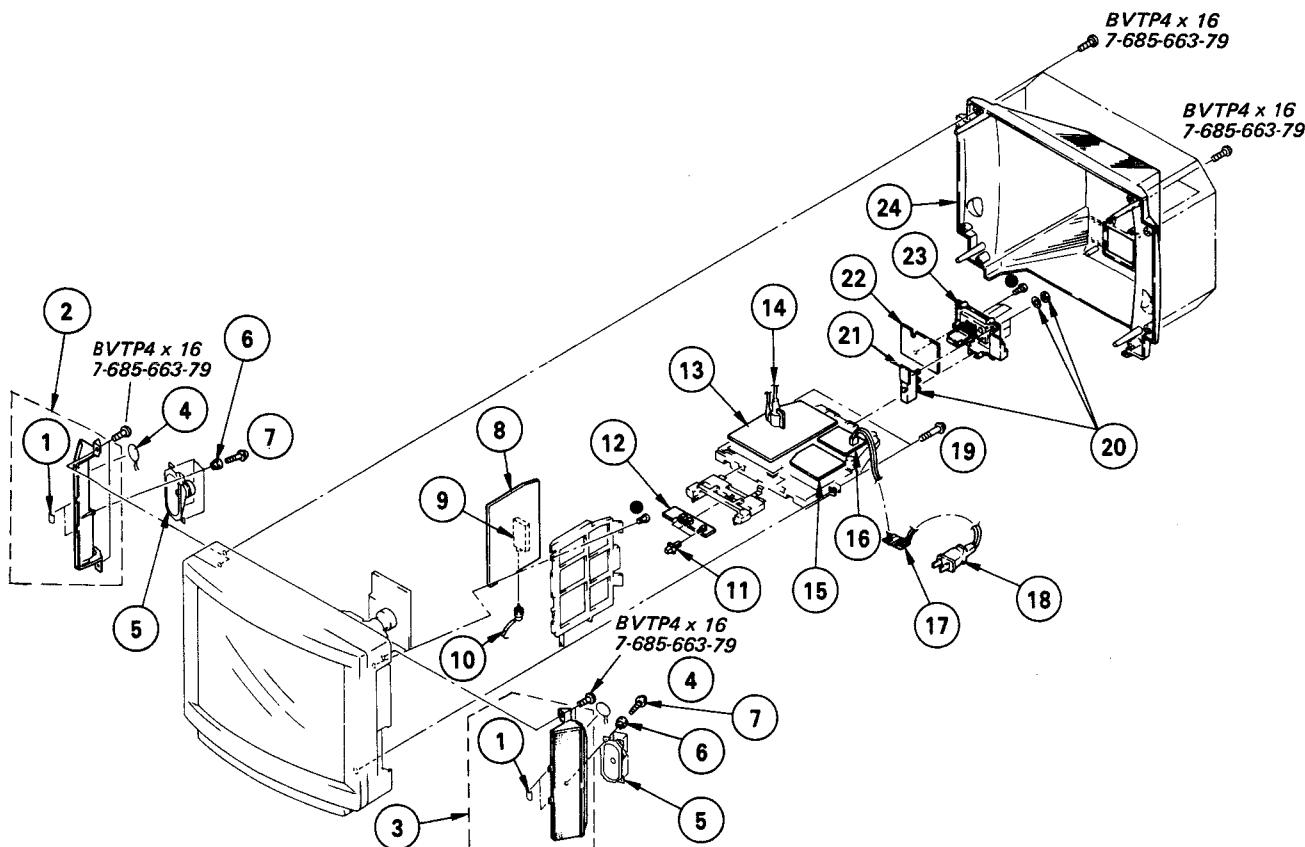
• Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ▲ are critical for safety.  
Replace only with part number specified.

### 7-1. REAR COVER

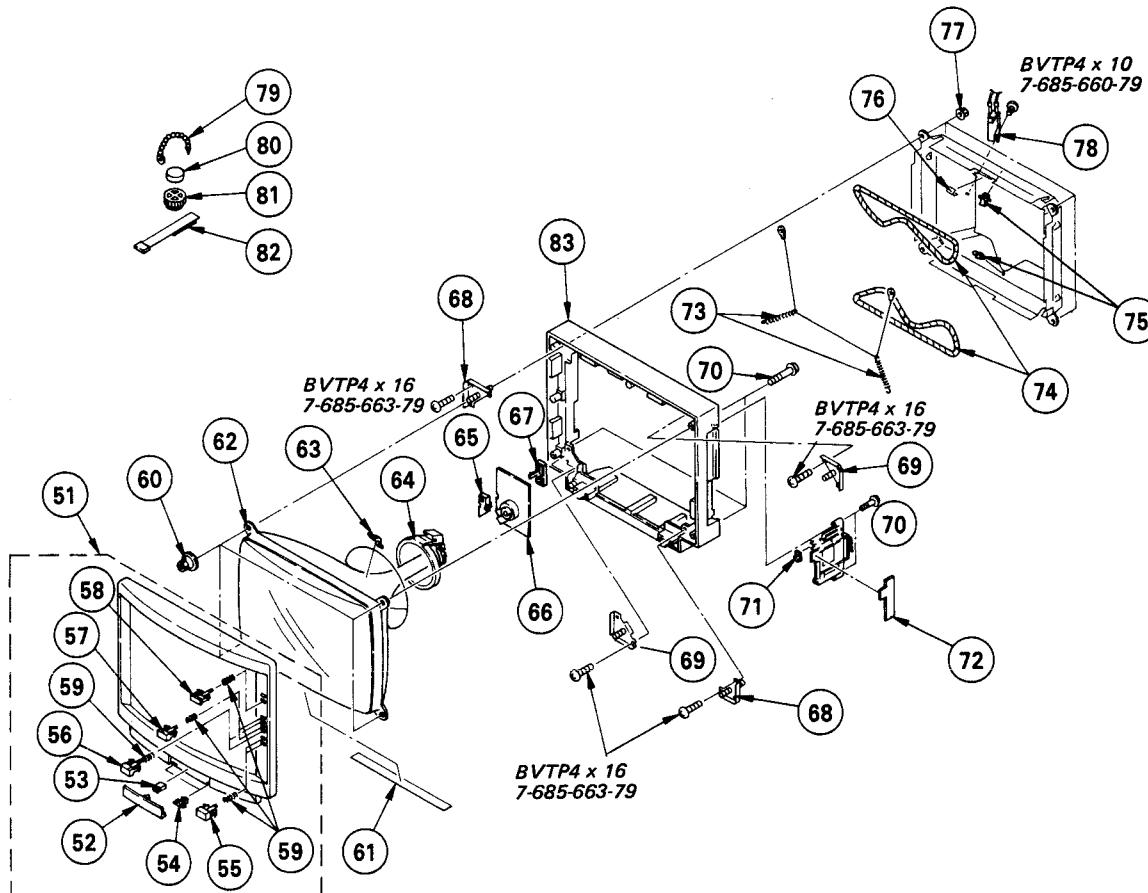
● : BVTP3 x 12      7-685-648-79

Les composants identifiés par une trame et une marque ▲ sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
1	3-831-441-XX	CUSHION (A)		14	▲1-439-416-31	TRANSFORMER ASSY, FLYBACK	
2	X-4388-413-1	PANEL (LEFT) ASSY, SP		15	*A-1316-076-A	G BOARD, COMPLETE	
3	X-4388-412-1	PANEL (RIGHT) ASSY, SP		16	*A-1245-424-A	F BOARD, COMPLETE (USA ONLY)	
4	1-529-062-11	BUZZER		17	*A-1245-430-A	F BOARD, COMPLETE (CANADIAN ONLY)	
5	1-503-914-11	SPEAKER		18	▲1-559-396-11	GROMMET, AC CORD	
6	*4-379-189-01	CUSHION, SPEAKER		19	4-319-520-11	CORD, POWER	
7	4-379-192-01	SCREW, TAPPING, STEP		20	▲1-417-125-16	SCREW, SPECIAL (+PW4X30)	
8	*A-1296-392-A	A BOARD, COMPLETE		21	*1-624-448-11	SELECTOR, ANTENNA	
9	▲1-463-771-11	TUNER, ET (BTP-201A)		22	*A-1394-130-A	U2 BOARD	
10	*1-558-745-11	CABLE, P-P		23	4-388-330-01	U1 BOARD, COMPLETE	
11	4-383-174-01	BUTTON, SWITCH		24	4-388-444-01	TERMINAL BOARD, ANTENNA	
12	*1-624-444-11	M1 BOARD			4-388-444-11	COVER, REAR (US ONLY)	
13	*A-1345-757-A	D BOARD, COMPLETE				COVER, REAR (CND ONLY)	

## 7-2. PICTURE TUBE



No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	X-4388-414-1	BEZEL ASSY (FOR MARBLE BLACK)	52-59	67	*4-379-160-01	COVER (REAR LID), CV	
	X-4388-414-2	BEZEL ASSY (FOR STONE)(USA ONLY)	52-59	68	*4-379-197-01	BRACKET (H), CRT	
52	4-388-441-01	DOOR, CONTROL		69	*4-376-989-01	BRACKET (E), CRT	
53	4-386-710-01	CATCHER, PUSH		70	4-319-520-11	SCREW, SPECIAL (+PW4X30)	
54	3-703-035-11	SHAFT, LID		71	*1-624-446-11	M3 BOARD	
55	4-383-187-01	BUTTON, SELECTION		72	*1-624-445-11	M2 BOARD	
56	4-383-186-01	BUTTON, MINUS		73	4-369-318-00	SPRING, TENSION	
57	4-383-185-01	BUTTON, PLUS		74	A-1-426-350-21	COIL, DEMAGNETIZATION	
58	4-388-327-01	BUTTON, POWER		75	*4-371-629-01	STOPPER, WIRE	
59	3-571-847-00	SPRING, COMPRESSION		76	3-831-441-X	CUSHION (A)	
60	4-376-980-01	NUT, SPECIAL, CRT		77	4-306-034-00	FLANGE NUT, (B) 5MM	
61	4-370-595-01	CLOTH, BLOTTING		78	A-1-230-940-21	RESISTOR ASSY, HIGH-VOLTAGE	
62	A-8-737-753-05	PICTURE TUBE (A68JMT50X)		79	4-308-870-00	CLIP, LEAD WIRE	
63	3-703-961-01	SPACER, DY		80	1-452-032-00	MAGNET, DISK; 10MM Ø	
64	A-1-451-275-11	DEFLECTION YOKE (SY158)		81	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
65	*4-379-167-01	COVER (MAIN), CV		82	X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
66	*A-1330-862-A	C BOARD, COMPLETE		83	4-388-443-01	CABINET (FOR MARBLE BLACK)	
					4-388-443-11	CABINET (FOR STONE) (USA ONLY)	
				84	*4-378-067-01	CUSHION, CRT	

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

SECTION 8  
ELECTRICAL PARTS LIST

F A

## NOTE:

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

## RESISTORS

- All resistors are in ohms
- F : nonflammable

When indicating parts by reference number, please include the board name.

## CAPACITORS

MF :  $\mu$ F, PF :  $\mu\mu$ F      MMH : mH, UH :  $\mu$ H

- The components identified by  $\square$  in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

## COILS

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	*A-1245-424-A	F BOARD, COMPLETE (USA ONLY)	*****				
	*A-1245-430-A	F BOARD, COMPLETE (CANADIAN ONLY)	*****				
						RELAY	
						RY601A1-515-601-11	RELAY
		CAPACITOR				TRANSFORMER	
C601	A1-136-311-71	FILM	0.47MF	20%	125V	T601 A1-421-599-11	TRANSFORMER, LINE FILTER (USA ONLY)
C605	A1-161-741-51	CERAMIC	0.001MF	10%	400V	A1-424-022-11	TRANSFORMER, LINE FILTER (CND ONLY)
C606	A1-161-953-51	CERAMIC	0.0047MF	20%	400V	T602 A1-424-022-11	TRANSFORMER, LINE FILTER
C607	A1-161-953-51	CERAMIC	0.0047MF	20%	400V	T603 A1-448-793-11	TRANSFORMER, POWER
C608	1-125-215-00	ELECT(BLOCK)	560MF		200V		
C610	1-106-220-00	MYLAR	0.1MF	10%	100V		
C611	1-102-125-00	CERAMIC	0.0047MF	10%	50V		
C612	1-102-125-00	CERAMIC	0.0047MF	10%	50V	THP601A1-808-081-11	THERMISTOR, POSITIVE
C613	1-124-479-11	ELECT	330MF	20%	25V		
C614	1-123-875-11	ELECT	10MF	20%	50V		
C617	1-124-120-11	ELECT	220MF	20%	25V	*A-1296-392-A	A BOARD, COMPLETE
C618	1-124-963-11	ELECT	33MF	20%	16V		*****
		DIODE				CONNECTOR	
D601	A1-8-719-300-07	DIODE RB406N				A1	*1-566-056-11 PIN, CONNECTOR 4P
D602	8-719-511-40	DIODE S1VB40				A2	*1-566-063-11 PIN, CONNECTOR 11P
D604	8-719-200-02	DIODE 10E2				A3	*1-508-766-00 4P PLUG (M)
						A4	*1-566-057-11 PIN, CONNECTOR 5P
						A5	*1-566-054-11 PIN, CONNECTOR 2P
						A6	*1-566-056-11 PIN, CONNECTOR 4P
						A7	*1-566-060-11 PIN, CONNECTOR 8P
						A8	*1-566-056-11 PIN, CONNECTOR 4P
						A9	*1-566-054-11 PIN, CONNECTOR 2P
						A10	*1-566-054-11 PIN, CONNECTOR 2P
						A11	*1-566-054-11 PIN, CONNECTOR 2P
						A12	*1-566-056-11 PIN, CONNECTOR 4P
						A13	*1-566-060-11 PIN, CONNECTOR 8P
						A14	*1-566-064-11 PIN, CONNECTOR 12P
						A15	*1-566-058-11 PIN, CONNECTOR 6P
						A16	*1-566-058-11 PIN, CONNECTOR 6P
						A17	*1-566-057-11 PIN, CONNECTOR 5P
						A18	*1-566-055-11 PIN, CONNECTOR 3P
						A22	*1-560-123-00 PLUG, CONNECTOR (2.5MM) 3P
						A23	*1-560-125-00 PLUG, CONNECTOR (2.5MM) 5P
		RESISTOR					
R601	A1-202-723-51	SOLID	2.2M	10%	1/2W		MODULE
R602	A1-205-900-11	WIREWOUND	1.2	5%	15W F	AM301	1-236-149-11 MODULE, APERTURE CONTROL
R603	1-216-444-11	METAL OXIDE	82K	5%	1W F	NM301	1-236-150-11 MODULE, NEW DYNAMIC COLOR
R606	1-215-863-11	METAL OXIDE	100	5%	1W F		
R607	1-249-421-11	CARBON	2.2K	5%	1/4W		
R609	1-247-713-11	CARBON	1K	5%	1/4W		CAPACITOR
R610	1-247-711-11	CARBON	680	5%	1/4W	C101	1-123-875-11 ELECT 10MF 20% 50V
R612	1-249-440-11	CARBON	82K	5%	1/4W	C102	1-124-908-11 ELECT 22MF 20% 25V
						C103	1-124-556-11 ELECT 2200MF 20% 16V
						C104	1-124-444-00 ELECT 220MF 20% 10V

A

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>			<u>Remark</u>
C106	1-119-160-00	ELECT	470MF		10V	C309	1-102-971-00	CERAMIC	82PF	5%	50V
C109	1-124-925-11	ELECT	2.2MF	20%	50V	C310	1-124-908-11	ELECT	22MF	20%	25V
C110	1-124-927-11	ELECT	4.7MF	20%	50V	C311	1-102-125-00	CERAMIC	0.0047MF	10%	50V
C111	1-124-499-11	ELECT	1MF	20%	50V	C312	1-124-464-11	ELECT	0.22MF	20%	50V
C112	1-124-499-11	ELECT	1MF	20%	50V	C313	1-124-464-11	ELECT	0.22MF	20%	50V
C113	1-124-499-11	ELECT	1MF	20%	50V	C315	1-123-875-11	ELECT	10MF	20%	50V
C114	1-123-875-11	ELECT	10MF	20%	50V	C317	1-102-945-00	CERAMIC	8PF	0.5PF	50V
C115	1-102-953-00	CERAMIC	18PF	5%	50V	C318	1-102-074-00	CERAMIC	0.001MF	10%	50V
C116	1-130-483-00	MYLAR	0.01MF	5%	50V	C319	1-124-902-00	ELECT	0.47MF	20%	50V
C117	1-124-499-11	ELECT	1MF	20%	50V	C320	1-124-284-00	ELECT	10MF	20%	16V
C118	1-130-483-00	MYLAR	0.01MF	5%	50V	C321	1-124-902-00	ELECT	0.47MF	20%	50V
C119	1-124-499-11	ELECT	1MF	20%	50V	C322	1-124-252-00	ELECT	0.33MF	20%	50V
C120	1-124-499-11	ELECT	1MF	20%	50V	C323	1-124-963-11	ELECT	33MF	20%	16V
C122	1-123-875-11	ELECT	10MF	20%	50V	C324	1-124-963-11	ELECT	33MF	20%	16V
C123	1-123-875-11	ELECT	10MF	20%	50V	C326	1-124-925-11	ELECT	2.2MF	20%	50V
C124	1-124-499-11	ELECT	1MF	20%	50V	C327	1-124-499-11	ELECT	1MF	20%	50V
C126	1-101-006-00	CERAMIC	0.047MF		50V	C329	1-130-475-00	MYLAR	0.0022MF	5%	50V
C127	1-102-963-00	CERAMIC	33PF	5%	50V	C330	1-130-473-00	MYLAR	0.0015MF	5%	50V
C128	1-102-965-00	CERAMIC	39PF	5%	50V	C331	1-124-443-00	ELECT	100MF	20%	10V
C129	1-102-125-00	CERAMIC	0.0047MF	10%	50V	C332	1-124-443-00	ELECT	100MF	20%	10V
C130	1-124-477-11	ELECT	47MF	20%	16V	C336	1-124-477-11	ELECT	47MF	20%	16V
C131	1-123-875-11	ELECT	10MF	20%	50V	C337	1-124-499-11	ELECT	1MF	20%	50V
C132	1-102-965-00	CERAMIC	39PF	5%	50V	C339	1-123-875-11	ELECT	10MF	20%	50V
C133	1-102-964-00	CERAMIC	36PF	5%	50V	C340	1-130-477-00	MYLAR	0.0033MF	5%	50V
C135	1-102-127-00	CERAMIC	0.0068MF	10%	50V	C341	1-102-858-00	CERAMIC	10PF	0.5PF	50V
C136	1-124-499-11	ELECT	1MF	20%	50V	C361	1-123-875-11	ELECT	10MF	20%	50V
C137	1-124-499-11	ELECT	1MF	20%	50V	C362	1-101-884-00	CERAMIC	56PF	5%	50V
C138	1-124-472-11	ELECT	470MF	20%	10V	C363	1-124-499-11	ELECT	1MF	20%	50V
C139	1-124-477-11	ELECT	47MF	20%	16V	C364	1-101-880-00	CERAMIC	47PF	5%	50V
C140	1-102-121-00	CERAMIC	0.0022MF	10%	50V	C365	1-124-499-11	ELECT	1MF	20%	50V
C141	1-124-925-11	ELECT	2.2MF	20%	50V	C366	1-101-888-00	CERAMIC	68PF	5%	50V
C142	1-126-101-11	ELECT	100MF	20%	16V	C367	1-102-961-00	CERAMIC	27PF	5%	50V
C144	1-130-483-00	MYLAR	0.01MF	5%	50V	C368	1-124-963-11	ELECT	33MF	20%	16V
C145	1-101-005-00	CERAMIC	0.022MF		50V	C369	1-124-499-11	ELECT	1MF	20%	50V
C146	1-123-875-11	ELECT	10MF	20%	50V	C370	1-124-443-00	ELECT	100MF	20%	10V
C147	1-102-121-00	CERAMIC	0.0022MF	10%	50V	C371	1-102-114-00	CERAMIC	470PF	10%	50V
C148	1-124-963-11	ELECT	33MF	20%	16V	C372	1-102-114-00	CERAMIC	470PF	10%	50V
C149	1-124-645-11	ELECT	10MF	20%	16V	C373	1-102-114-00	CERAMIC	470PF	10%	50V
C150	1-124-477-11	ELECT	47MF	20%	16V	C390	1-123-875-11	ELECT	10MF	20%	50V
C153	1-123-875-11	ELECT	10MF	20%	50V	C391	1-130-483-00	MYLAR	0.01MF	5%	50V
C155	1-124-477-11	ELECT	47MF	20%	16V	C801	1-124-963-11	ELECT	33MF	20%	16V
C156	1-102-949-00	CERAMIC	12PF	5%	50V	C802	1-126-101-11	ELECT	100MF	20%	16V
C157	1-102-949-00	CERAMIC	12PF	5%	50V	C803	1-102-963-00	CERAMIC	33PF	5%	50V
C159	1-123-875-11	ELECT	10MF	20%	50V	C804	1-102-963-00	CERAMIC	33PF	5%	50V
C160	1-124-477-11	ELECT	47MF	20%	16V	C805	1-130-479-00	MYLAR	0.0047MF	5%	50V
C162	1-124-482-11	ELECT	33MF	20%	25V	C806	1-130-479-00	MYLAR	0.0047MF	5%	50V
C163	1-101-005-00	CERAMIC	0.022MF		50V	C807	1-102-963-00	CERAMIC	33PF	5%	50V
C201	1-126-101-11	ELECT	100MF	20%	16V	C808	1-124-284-00	ELECT	10MF	20%	16V
C202	1-124-477-11	ELECT	47MF	20%	16V	C809	1-124-284-00	ELECT	10MF	20%	16V
C203	1-124-631-11	ELECT	47MF	20%	16V	C814	1-124-477-11	ELECT	47MF	20%	16V
C204	1-102-121-00	CERAMIC	0.0022MF	10%	50V	C820	1-124-927-11	ELECT	4.7MF	20%	50V
C205	1-124-477-11	ELECT	47MF	20%	16V	C821	1-124-478-11	ELECT	100MF	20%	25V
C206	1-124-499-11	ELECT	1MF	20%	50V	C822	1-124-927-11	ELECT	4.7MF	20%	50V
C211	1-124-477-11	ELECT	47MF	20%	16V	C823	1-130-489-00	MYLAR	0.033MF	5%	50V
C212	1-102-074-00	CERAMIC	0.001MF	10%	50V	C824	1-124-120-11	ELECT	220MF	20%	25V
C214	1-123-875-11	ELECT	10MF	20%	50V	C825	1-124-927-11	ELECT	4.7MF	20%	50V
C215	1-123-875-11	ELECT	10MF	20%	50V	C826	1-124-927-11	ELECT	4.7MF	20%	50V
C301	1-126-101-11	ELECT	100MF	20%	16V	C827	1-130-489-00	MYLAR	0.033MF	5%	50V
C302	1-126-103-11	ELECT	470MF	20%	16V	C828	1-124-478-11	ELECT	100MF	20%	25V
C303	1-126-101-11	ELECT	100MF	20%	16V	C829	1-130-495-00	MYLAR	0.1MF	5%	50V
C304	1-124-963-11	ELECT	33MF	20%	16V	C830	1-124-618-11	ELECT	2200MF	20%	35V
C305	1-124-499-11	ELECT	1MF	20%	50V	C831	1-124-618-11	ELECT	2200MF	20%	35V
C306	1-123-875-11	ELECT	10MF	20%	50V	C832	1-124-618-11	ELECT	2200MF	20%	35V
C307	1-124-927-11	ELECT	4.7MF	20%	50V	C833	1-130-495-00	MYLAR	0.1MF	5%	50V
C308	1-102-129-00	CERAMIC	0.01MF	10%	50V	C834	1-123-875-11	ELECT	10MF	20%	50V

**A**

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **A** are critical for safety.  
Replace only with part number specified.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
C835	1-123-875-11	ELECT	10MF	20%	50V		
C836	1-126-101-11	ELECT	100MF	20%	16V		
C837	1-124-360-00	ELECT	1000MF	20%	16V		
C838	1-130-489-00	MYLAR	0.033MF	5%	50V		
C839	1-130-489-00	MYLAR	0.033MF	5%	50V		
C840	1-130-471-00	MYLAR	0.001MF	5%	50V		
C841	1-130-471-00	MYLAR	0.001MF	5%	50V		
C1401	1-101-004-00	CERAMIC	0.01MF	50V			
C1402	1-124-908-11	ELECT	22MF	20%	25V		
C1403	1-102-959-00	CERAMIC	22PF	5%	50V		
C1404	1-124-499-11	ELECT	1MF	20%	50V		
C1408	1-126-101-11	ELECT	100MF	20%	16V		
<u>COMPOSITION CIRCUIT BLOCK</u>							
CP008	1-235-823-11	NETWORK					
CP102	1-235-823-11	NETWORK					
<u>TRIMMER</u>							
CV316	1-141-147-XX	CAP, TRIMMER					
<u>DIODE</u>							
D101	8-719-110-78	DIODE RD33ES-B2					
D104	8-719-109-90	DIODE RD5.6ES-B3					
D107	8-719-911-19	DIODE 1SS119					
D108	8-719-911-19	DIODE 1SS119					
D109	8-719-911-19	DIODE 1SS119					
D111	8-719-911-19	DIODE 1SS119					
D112	8-719-911-19	DIODE 1SS119					
D113	8-719-911-19	DIODE 1SS119					
D114	8-719-911-19	DIODE 1SS119					
D115	8-719-109-74	DIODE RD4.3ES-B1					
D118	8-719-911-19	DIODE 1SS119					
D119	8-719-911-19	DIODE 1SS119					
D120	8-719-911-19	DIODE 1SS119					
D121	8-719-911-19	DIODE 1SS119					
D122	8-719-911-19	DIODE 1SS119					
D123	8-719-911-19	DIODE 1SS119					
D124	8-719-911-19	DIODE 1SS119					
D125	8-719-911-19	DIODE 1SS119					
D126	8-719-911-19	DIODE 1SS119					
D127	8-719-911-19	DIODE 1SS119					
D128	8-719-911-19	DIODE 1SS119					
D131	8-719-911-19	DIODE 1SS119					
D301	8-719-911-19	DIODE 1SS119					
D302	8-719-911-19	DIODE 1SS119					
D303	8-719-911-19	DIODE 1SS119					
D304	8-719-911-19	DIODE 1SS119					
D305	8-719-911-19	DIODE 1SS119					
D801	8-719-911-19	DIODE 1SS119					
D1401	8-719-110-34	DIODE RD13ES-B					
D1402	8-719-911-19	DIODE 1SS119					
D1403	8-719-110-34	DIODE RD13ES-B					
D1404	8-719-911-19	DIODE 1SS119					
<u>DELAY LINE</u>							
DL301	1-415-478-11	DELAY LINE					
DL302	1-415-398-11	DELAY LINE, Y					
DL303	1-415-509-11	DELAY LINE					
DL304	1-415-509-11	DELAY LINE					
<u>IC</u>							
IC101	8-759-630-78	IC M50439-614SP					
IC102	8-759-803-24	IC CXK1004L					
IC103	8-759-102-28	IC UPD6326C					
IC105	8-759-701-79	IC NJM7812FA					
IC106	8-759-710-04	IC NJM78M93FD					
IC107	8-759-112-06	IC UPC78N05H					
IC201	8-752-006-10	IC CX20061					
IC301	8-758-480-00	IC CX848					
IC302	8-759-913-11	IC CX20125					
IC801	8-759-132-40	IC UPC324C					
IC802	8-759-907-16	IC CX10026					
IC804A	8-759-803-29	IC LA4270					
	4-302-428-00	HEAD, WASHER, TAPPING SCREW; IC804					
IC1401	8-759-140-53	IC UPD4053BC					
MM201	8-749-900-80	IC BX1458					
<u>IF BLOCK</u>							
IF201	1-464-755-11	IF BLOCK (IFE-450)					
<u>COIL</u>							
L103	1-410-482-31	INDUCTOR	100UH				
L104	1-410-465-41	INDUCTOR	3.9UH				
L105	1-410-465-41	INDUCTOR	3.9UH				
L106	1-410-465-41	INDUCTOR	3.9UH				
L203	1-410-469-41	INDUCTOR	8.2UH				
L301	1-410-478-11	INDUCTOR	47UH				
L302	1-410-477-21	INDUCTOR	39UH				
L303	1-404-540-11	COIL					
L304	1-408-411-00	INDUCTOR	15UH				
L305	1-410-459-11	INDUCTOR	1.2UH				
L306	1-410-459-11	INDUCTOR	1.2UH				
L307	1-410-459-11	INDUCTOR	1.2UH				
L308	1-410-068-11	INDUCTOR	5.6MMH				
L310	1-410-473-11	INDUCTOR	18UH				
<u>TRANSISTOR</u>							
Q101	8-729-178-54	TRANSISTOR 2SC2785					
Q103	8-729-178-54	TRANSISTOR 2SC2785					
Q105	8-729-177-43	TRANSISTOR 2SD774					
Q108	8-729-178-54	TRANSISTOR 2SC2785					
Q109	8-729-117-54	TRANSISTOR 2SA1175					
Q110	8-729-178-54	TRANSISTOR 2SC2785					
Q111	8-729-178-54	TRANSISTOR 2SC2785					
Q113	8-729-117-54	TRANSISTOR 2SA1175					
Q114	8-729-178-54	TRANSISTOR 2SC2785					
Q115	8-729-178-54	TRANSISTOR 2SC2785					
Q116	8-729-178-54	TRANSISTOR 2SC2785					
Q117	8-729-178-54	TRANSISTOR 2SC2785					
Q118	8-729-178-54	TRANSISTOR 2SC2785					
Q119	8-729-178-54	TRANSISTOR 2SC2785					
Q120	8-729-178-54	TRANSISTOR 2SC2785					
Q121	8-729-178-54	TRANSISTOR 2SC2785					
Q122	8-729-178-54	TRANSISTOR 2SC2785					
Q202	8-729-178-54	TRANSISTOR 2SC2785					
Q203	8-729-177-43	TRANSISTOR 2SD774					
Q205	8-729-178-54	TRANSISTOR 2SC2785					
Q301	8-729-117-54	TRANSISTOR 2SA1175					
Q303	8-729-364-12	TRANSISTOR 2SC641K					
Q304	8-729-117-54	TRANSISTOR 2SA1175					
Q305	8-729-178-54	TRANSISTOR 2SC2785					



The components identified by shading and mark are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une trame et une marque sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
Q306	8-729-178-54	TRANSISTOR 2SC2785		R038	1-249-433-11	CARBON	22K 5% 1/4W
Q307	8-729-178-54	TRANSISTOR 2SC2785		R039	1-249-414-11	CARBON	560 5% 1/4W
Q311	8-729-117-54	TRANSISTOR 2SA1175		R040	1-249-431-11	CARBON	15K 5% 1/4W
Q313	8-729-117-54	TRANSISTOR 2SA1175		R041	1-249-414-11	CARBON	560 5% 1/4W
Q361	8-729-178-54	TRANSISTOR 2SC2785		R044	1-249-414-11	CARBON	560 5% 1/4W
Q362	8-729-178-54	TRANSISTOR 2SC2785		R101	1-247-722-11	CARBON	5.6K 5% 1/4W
Q363	8-729-178-54	TRANSISTOR 2SC2785		R102	1-247-713-11	CARBON	1K 5% 1/4W
Q364	8-729-178-54	TRANSISTOR 2SC2785		R103	1-215-923-00	METAL OXIDE	10K 5% 3W F
Q365	8-729-178-54	TRANSISTOR 2SC2785		R104	1-249-435-11	CARBON	33K 5% 1/4W
Q366	8-729-178-54	TRANSISTOR 2SC2785		R105	1-249-439-11	CARBON	68K 5% 1/4W
Q367	8-729-178-54	TRANSISTOR 2SC2785		R106	1-249-393-11	CARBON	10 5% 1/4W F
Q368	8-729-178-54	TRANSISTOR 2SC2785		R107	1-249-467-11	CARBON	68K 5% 1/4W
Q369	8-729-178-54	TRANSISTOR 2SC2785		R108	1-249-435-11	CARBON	33K 5% 1/4W
Q391	8-729-178-54	TRANSISTOR 2SC2785		R113	1-249-416-11	CARBON	820 5% 1/4W
Q392	8-729-178-54	TRANSISTOR 2SC2785		R114	1-249-429-11	CARBON	10K 5% 1/4W
Q801	8-729-207-35	TRANSISTOR 2SJ105-Y		R115	1-249-421-11	CARBON	2.2K 5% 1/4W
Q1401	8-729-178-54	TRANSISTOR 2SC2785		R116	1-249-421-11	CARBON	2.2K 5% 1/4W
Q1402	8-729-178-54	TRANSISTOR 2SC2785		R117	1-247-717-11	CARBON	2.2K 5% 1/4W
Q1403	8-729-178-54	TRANSISTOR 2SC2785		R118	1-249-433-11	CARBON	22K 5% 1/4W
Q1404	8-729-178-54	TRANSISTOR 2SC2785		R119	1-249-417-11	CARBON	1K 5% 1/4W
Q1405	8-729-178-54	TRANSISTOR 2SC2785		R120	1-249-437-11	CARBON	47K 5% 1/4W
Q1406	8-729-178-54	TRANSISTOR 2SC2785		R121	1-249-434-11	CARBON	27K 5% 1/4W
Q1407	8-729-178-54	TRANSISTOR 2SC2785		R122	1-247-725-11	CARBON	10K 5% 1/4W
Q1408	8-729-178-54	TRANSISTOR 2SC2785		R123	1-247-705-11	CARBON	270 5% 1/4W
Q1409	8-729-178-54	TRANSISTOR 2SC2785		R124	1-249-417-11	CARBON	1K 5% 1/4W
<u>RESISTOR</u>							
R001	1-249-421-11	CARBON	2.2K 5% 1/4W	R125	1-249-417-11	CARBON	1K 5% 1/4W
R002	1-249-425-11	CARBON	4.7K 5% 1/4W	R126	1-249-429-11	CARBON	10K 5% 1/4W
R003	1-249-414-11	CARBON	560 5% 1/4W	R127	1-249-417-11	CARBON	1K 5% 1/4W
R004	1-249-414-11	CARBON	560 5% 1/4W	R128	1-247-713-11	CARBON	1K 5% 1/4W
R005	1-249-414-11	CARBON	560 5% 1/4W	R130	1-249-433-11	CARBON	22K 5% 1/4W
R006	1-249-414-11	CARBON	560 5% 1/4W	R131	1-249-421-11	CARBON	2.2K 5% 1/4W
R007	1-249-414-11	CARBON	560 5% 1/4W	R133	1-249-429-11	CARBON	10K 5% 1/4W
R008	1-249-414-11	CARBON	560 5% 1/4W	R136	1-247-700-11	CARBON	100 5% 1/4W
R009	1-249-414-11	CARBON	560 5% 1/4W	R137	1-249-437-11	CARBON	47K 5% 1/4W
R010	1-249-414-11	CARBON	560 5% 1/4W	R139	1-249-417-11	CARBON	1K 5% 1/4W
R011	1-249-414-11	CARBON	560 5% 1/4W	R140	1-249-417-11	CARBON	1K 5% 1/4W
R012	1-249-414-11	CARBON	560 5% 1/4W	R141	1-249-417-11	CARBON	1K 5% 1/4W
R013	1-249-414-11	CARBON	560 5% 1/4W	R142	1-249-429-11	CARBON	10K 5% 1/4W
R014	1-247-717-11	CARBON	2.2K 5% 1/4W	R143	1-249-429-11	CARBON	10K 5% 1/4W
R015	1-247-717-11	CARBON	2.2K 5% 1/4W	R145	1-249-414-11	CARBON	560 5% 1/4W
R016	1-249-421-11	CARBON	2.2K 5% 1/4W	R146	1-249-417-11	CARBON	1K 5% 1/4W
R017	1-247-717-11	CARBON	2.2K 5% 1/4W	R147	1-249-416-11	CARBON	820 5% 1/4W
R018	1-249-416-11	CARBON	820 5% 1/4W	R148	1-249-432-11	CARBON	18K 5% 1/4W
R019	1-249-429-11	CARBON	10K 5% 1/4W	R149	1-249-423-11	CARBON	3.3K 5% 1/4W
R020	1-249-429-11	CARBON	10K 5% 1/4W	R150  1-249-465-91	1-249-465-91	CARBON	47K 5% 1/4W F
R021	1-249-434-11	CARBON	27K 5% 1/4W	R151  1-247-725-81	1-247-725-81	CARBON	10K 5% 1/4W F
R022	1-249-414-11	CARBON	560 5% 1/4W	R152	1-249-433-11	CARBON	22K 5% 1/4W
R023	1-249-414-11	CARBON	560 5% 1/4W	R153	1-249-426-11	CARBON	5.6K 5% 1/4W
R024	1-249-421-11	CARBON	2.2K 5% 1/4W	R154	1-247-895-00	CARBON	470K 5% 1/4W
R025	1-249-421-11	CARBON	2.2K 5% 1/4W	R155	1-249-439-11	CARBON	68K 5% 1/4W
R026	1-249-421-11	CARBON	2.2K 5% 1/4W	R156	1-249-424-11	CARBON	3.9K 5% 1/4W
R027	1-249-421-11	CARBON	2.2K 5% 1/4W	R158	1-247-895-00	CARBON	470K 5% 1/4W
R028	1-249-423-11	CARBON	3.3K 5% 1/4W	R160	1-249-439-11	CARBON	68K 5% 1/4W
R029	1-249-425-11	CARBON	4.7K 5% 1/4W	R161	1-249-424-11	CARBON	3.9K 5% 1/4W
R030	1-249-425-11	CARBON	4.7K 5% 1/4W	R162	1-249-421-11	CARBON	2.2K 5% 1/4W
R031	1-249-414-11	CARBON	560 5% 1/4W	R163	1-249-426-11	CARBON	5.6K 5% 1/4W
R032	1-249-414-11	CARBON	560 5% 1/4W	R166	1-249-429-11	CARBON	10K 5% 1/4W
R033	1-249-421-11	CARBON	2.2K 5% 1/4W	R172	1-249-434-11	CARBON	27K 5% 1/4W
R034	1-249-426-11	CARBON	5.6K 5% 1/4W	R173	1-249-436-11	CARBON	39K 5% 1/4W
R035	1-249-417-11	CARBON	1K 5% 1/4W	R174	1-249-423-11	CARBON	3.3K 5% 1/4W
R036	1-249-416-11	CARBON	820 5% 1/4W	R175	1-249-429-11	CARBON	10K 5% 1/4W
R037	1-249-416-11	CARBON	820 5% 1/4W	R178	1-249-405-11	CARBON	100 5% 1/4W
				R179	1-249-405-11	CARBON	100 5% 1/4W
				R180	1-249-433-11	CARBON	22K 5% 1/4W
				R181	1-247-712-11	CARBON	820 5% 1/4W

**A**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R182	1-249-415-11	CARBON	680 5% 1/4W	R337	1-247-895-00	CARBON	470K 5% 1/4W
R183	1-249-416-11	CARBON	820 5% 1/4W	R338	1-215-487-00	CARBON	560K 5% 1/4W
R184	1-215-493-00	CARBON	1M 5% 1/4W	R339	1-249-411-11	CARBON	330 5% 1/4W
R185	1-249-429-11	CARBON	10K 5% 1/4W	R340	1-249-437-11	CARBON	47K 5% 1/4W
R186	1-249-429-11	CARBON	10K 5% 1/4W	R341	1-249-430-11	CARBON	12K 5% 1/4W
R187	1-216-393-00	METAL OXIDE	2.2 5% 3W F	R342	1-249-417-11	CARBON	1K 5% 1/4W
R191	1-249-417-11	CARBON	1K 5% 1/4W	R343	1-249-418-11	CARBON	1.2K 5% 1/4W
R204	1-249-435-11	CARBON	33K 5% 1/4W	R344	1-249-412-11	CARBON	390 5% 1/4W
R205	1-247-715-11	CARBON	1.5K 5% 1/4W	R346	1-249-437-11	CARBON	47K 5% 1/4W
R206	1-249-425-11	CARBON	4.7K 5% 1/4W	R347	1-249-421-11	CARBON	2.2K 5% 1/4W
R207	1-249-435-11	CARBON	33K 5% 1/4W	R348	1-249-420-11	CARBON	1.8K 5% 1/4W
R208	1-249-411-11	CARBON	330 5% 1/4W	R349	1-249-417-11	CARBON	1K 5% 1/4W
R213	1-249-411-11	CARBON	330 5% 1/4W	R350	1-249-405-11	CARBON	100 5% 1/4W
R214	1-249-411-11	CARBON	330 5% 1/4W	R351	1-249-420-11	CARBON	1.8K 5% 1/4W
R215	1-249-405-11	CARBON	100 5% 1/4W	R352	1-249-429-11	CARBON	10K 5% 1/4W
R217	1-249-417-11	CARBON	1K 5% 1/4W	R353	1-249-411-11	CARBON	330 5% 1/4W
R219	1-249-405-11	CARBON	100 5% 1/4W	R355	1-249-409-11	CARBON	220 5% 1/4W
R221	1-249-413-11	CARBON	470 5% 1/4W	R356	1-247-883-00	CARBON	150K 5% 1/4W
R222	1-247-700-11	CARBON	100 5% 1/4W	R357	1-215-493-00	CARBON	1M 5% 1/4W
R223	1-249-438-11	CARBON	56K 5% 1/4W	R358	1-249-440-11	CARBON	82K 5% 1/4W
R224	1-249-433-11	CARBON	22K 5% 1/4W	R359	1-249-405-11	CARBON	100 5% 1/4W
R225	1-249-438-11	CARBON	56K 5% 1/4W	R360	1-249-429-11	CARBON	10K 5% 1/4W
R226	1-249-433-11	CARBON	22K 5% 1/4W	R361	1-249-435-11	CARBON	33K 5% 1/4W
R230	1-247-706-11	CARBON	330 5% 1/4W	R362	1-249-434-11	CARBON	27K 5% 1/4W
R231	1-249-437-11	CARBON	47K 5% 1/4W	R363	1-249-418-11	CARBON	1.2K 5% 1/4W
R232	1-247-706-11	CARBON	330 5% 1/4W	R364	1-249-413-11	CARBON	470 5% 1/4W
R233	1-249-411-11	CARBON	330 5% 1/4W	R365	1-249-418-11	CARBON	1.2K 5% 1/4W
R234	1-249-411-11	CARBON	330 5% 1/4W	R366	1-249-415-11	CARBON	680 5% 1/4W
R240	1-249-425-11	CARBON	4.7K 5% 1/4W	R367	1-249-419-11	CARBON	1.5K 5% 1/4W
R242	1-249-469-11	CARBON	100K 5% 1/4W	R368	1-247-708-11	CARBON	470 5% 1/4W
R296	1-249-417-11	CARBON	1K 5% 1/4W	R369	1-249-415-11	CARBON	680 5% 1/4W
R302	1-249-417-11	CARBON	1K 5% 1/4W	R370	1-249-415-11	CARBON	680 5% 1/4W
R303	1-249-431-11	CARBON	15K 5% 1/4W	R371	1-249-415-11	CARBON	680 5% 1/4W
R304	1-249-421-11	CARBON	2.2K 5% 1/4W	R372	1-249-419-11	CARBON	1.5K 5% 1/4W
R305	1-249-429-11	CARBON	10K 5% 1/4W	R373	1-249-418-11	CARBON	1.2K 5% 1/4W
R306	1-249-429-11	CARBON	10K 5% 1/4W	R374	1-249-419-11	CARBON	1.5K 5% 1/4W
R307	1-215-489-00	CARBON	680K 5% 1/4W	R375	1-249-418-11	CARBON	1.2K 5% 1/4W
R308	1-247-891-00	CARBON	330K 5% 1/4W	R376	1-249-415-11	CARBON	680 5% 1/4W
R310	1-247-721-11	CARBON	4.7K 5% 1/4W	R377	1-249-413-11	CARBON	470 5% 1/4W
R311	1-249-409-11	CARBON	220 5% 1/4W	R378	1-249-415-11	CARBON	680 5% 1/4W
R312	1-249-409-11	CARBON	220 5% 1/4W	R379	1-249-418-11	CARBON	1.2K 5% 1/4W
R313	1-249-409-11	CARBON	220 5% 1/4W	R380	1-249-411-11	CARBON	330 5% 1/4W
R314	1-247-706-11	CARBON	330 5% 1/4W	R381	1-249-418-11	CARBON	1.2K 5% 1/4W
R315	1-247-706-11	CARBON	330 5% 1/4W	R382	1-249-425-11	CARBON	4.7K 5% 1/4W
R316	1-247-706-11	CARBON	330 5% 1/4W	R383	1-249-422-11	CARBON	2.7K 5% 1/4W
R317	1-249-417-11	CARBON	1K 5% 1/4W	R384	1-249-420-11	CARBON	1.8K 5% 1/4W
R318	1-249-422-11	CARBON	2.7K 5% 1/4W	R385	1-247-891-00	CARBON	330K 5% 1/4W
R319	1-249-422-11	CARBON	2.7K 5% 1/4W	R386	1-249-407-11	CARBON	150 5% 1/4W
R320	1-249-422-11	CARBON	2.7K 5% 1/4W	R387	1-249-407-11	CARBON	150 5% 1/4W
R321	1-215-489-00	CARBON	680K 5% 1/4W	R388	1-249-407-11	CARBON	150 5% 1/4W
R322	1-249-434-11	CARBON	27K 5% 1/4W	R391	1-249-434-11	CARBON	27K 5% 1/4W
R323	1-249-424-11	CARBON	3.9K 5% 1/4W	R392	1-249-424-11	CARBON	3.9K 5% 1/4W
R324	1-249-411-11	CARBON	330 5% 1/4W	R393	1-249-409-11	CARBON	220 5% 1/4W
R325	1-249-433-11	CARBON	22K 5% 1/4W	R394	1-249-411-11	CARBON	330 5% 1/4W
R326	1-249-423-11	CARBON	3.3K 5% 1/4W	R395	1-249-417-11	CARBON	1K 5% 1/4W
R327	1-249-422-11	CARBON	2.7K 5% 1/4W	R396	1-249-417-11	CARBON	1K 5% 1/4W
R328	1-247-714-11	CARBON	1.2K 5% 1/4W	R397	1-247-725-11	CARBON	10K 5% 1/4W
R329	1-249-421-11	CARBON	2.2K 5% 1/4W	R398	1-249-417-11	CARBON	1K 5% 1/4W
R330	1-247-713-11	CARBON	1K 5% 1/4W	R802	1-249-423-11	CARBON	3.3K 5% 1/4W
R331	1-249-405-11	CARBON	100 5% 1/4W	R803	1-249-423-11	CARBON	3.3K 5% 1/4W
R332	1-249-412-11	CARBON	390 5% 1/4W	R804	1-249-462-11	CARBON	22K 5% 1/4W
R333	1-249-433-11	CARBON	22K 5% 1/4W	R805	1-249-433-11	CARBON	22K 5% 1/4W
R334	1-249-416-11	CARBON	820 5% 1/4W	R806	1-249-429-11	CARBON	10K 5% 1/4W
R335	1-247-713-11	CARBON	1K 5% 1/4W	R807	1-249-433-11	CARBON	22K 5% 1/4W
R336	1-247-726-11	CARBON	33K 5% 1/4W	R808	1-249-433-11	CARBON	22K 5% 1/4W

A

M1

M2

**M2**    **M3**    **G**

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **A** are critical for safety.  
Replace only with part number specified.

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
<u>RESISTOR</u>							
R1301	1-249-405-11	CARBON	100 5% 1/4W	D651	8-719-109-97	DIODE RD6.8ES-B2	
R1302	1-249-405-11	CARBON	100 5% 1/4W	D654	8-719-924-06	DIODE ERC24-06S	
<u>SWITCH</u>							
S1301A	1-554-804-12	SWITCH, PUSH (1 KEY) (POWER)		D655	8-719-924-06	DIODE ERC24-06S	
S1302	1-554-804-11	SWITCH, PUSH (1 KEY)		D657	8-719-100-80	DIODE RD20ES-B2	
S1303	1-554-804-11	SWITCH, PUSH (1 KEY)		D658	8-719-911-19	DIODE 1SS119	
S1304	1-554-804-11	SWITCH, PUSH (1 KEY)		D681	8-719-301-64	DIODE RU4DS	
S1305	1-554-804-11	SWITCH, PUSH (1 KEY)		D683	8-719-933-13	DIODE ERC35-02	
S1306	1-554-804-11	SWITCH, PUSH (1 KEY)		D685	8-719-300-76	DIODE RH1A	
S1307	1-554-804-11	SWITCH, PUSH (1 KEY)		D686	8-719-933-13	DIODE ERC35-02	
*****							
*1-624-446-11	M3 BOARD		*****	D687	8-719-110-48	DIODE RD18ES-B1	
<u>CONNECTOR</u>							
G1	*1-508-767-00	5P PLUG		G2	*1-566-054-11	PIN, CONNECTOR 2P	
G3	*1-508-766-00	4P PLUG (M)					
<u>IC</u>							
IC1301	8-749-900-36	IC BX1393		IC651	8-759-100-75	IC UPC1394C	
IC682A 8-719-927-74 DIODE PC817-C							
<u>CONNECTOR</u>							
M6	*1-566-042-11	PIN, CONNECTOR 3P		<u>MODULE</u>			
*****							
*A-1316-076-A	G BOARD, COMPLETE		*****	IC681A 1-235-971-12 POWER MODULE (DM-36)			
<u>CAPACITOR</u>							
C651	1-123-942-51	ELECT	47MF 20% 200V	L651	1-407-365-00	COIL, CHOKE	
C652	1-136-064-00	FILM	0.002MF 3% 2KV	L652	1-407-365-00	COIL, CHOKE	
C653	1-129-765-00	FILM	0.047MF 10% 200V	L681	1-425-612-00	COIL, ARE-CORE	
C654	1-124-902-00	ELECT	0.47MF 20% 50V	L689	1-425-612-00	COIL, ARE-CORE	
C655	1-162-318-11	CERAMIC	0.001MF 10% 500V	L690	1-425-612-00	COIL, ARE-CORE	
<u>TRANSISTOR</u>							
C656	1-124-472-11	ELECT	470MF 20% 10V	Q651 A 8-729-301-56	TRANSISTOR 2SC3387-01AB		
C657	1-124-963-11	ELECT	33MF 20% 16V	*4-302-428-00	HEAD, WASHER, TAPPING SCREW; Q651		
C658	1-130-475-00	MYLAR	0.0022MF 5% 50V	*4-341-751-01	PAWL; Q651		
C659	1-102-074-00	CERAMIC	0.001MF 10% 50V	4-363-414-00	SPACER, MICA; Q651		
C660	1-123-875-11	ELECT	10MF 20% 50V	Q652	8-729-168-82	TRANSISTOR 2SC2688	
C661	1-161-953-00	CERAMIC	0.0047MF 20% 400V	Q653	4-382-216-01	SPACER, MICA; Q652	
C664	1-162-318-11	CERAMIC	0.001MF 10% 500V	Q655	8-729-168-82	TRANSISTOR 2SC2688	
C665	1-102-842-00	CERAMIC	470PF 5% 50V	Q655	8-729-200-17	TRANSISTOR 2SA1091	
C681	1-162-116-00	CERAMIC	680PF 10% 2KV	<u>RESISTOR</u>			
C682	1-102-030-00	CERAMIC	330PF 10% 500V	R650	1-216-486-00	METAL OXIDE	8.2K 5% 3W F
C683	1-102-030-00	CERAMIC	330PF 10% 500V	R651	1-216-483-11	METAL OXIDE	2.7K 5% 3W F
C685	1-125-512-11	ELECT(BLOCK)	1000MF 20% 160V	R652 A 1-247-694-91	CARBON	33 5% 1/4W F	
C686	1-124-618-11	ELECT	2200MF 20% 35V	R653	1-216-486-00	METAL OXIDE	8.2K 5% 3W F
C687	1-124-900-11	ELECT	470MF 20% 35V	R654	1-249-496-11	CARBON	100K 5% 1/2W
C688	1-124-557-11	ELECT	1000MF 20% 25V	R655	1-247-706-11	CARBON	330 5% 1/4W
C689	1-102-030-00	CERAMIC	330PF 10% 500V	R656	1-246-529-00	CARBON	220K 5% 1/4W
C690	1-124-499-11	ELECT	1MF 20% 50V	R657	1-249-398-11	CARBON	27 5% 1/4W
C691	1-102-074-00	CERAMIC	0.001MF 10% 50V	R658	1-249-424-11	CARBON	3.9K 5% 1/4W
C692	1-162-134-11	CERAMIC	470PF 10% 2KV	R659	1-217-189-21	WIREWOUND	0.12 10% 2W F
C693	1-161-973-00	CERAMIC	220PF 10% 400V	R660	1-215-459-00	METAL	39K 1% 1/6W
C694	1-123-875-11	ELECT	10MF 20% 50V	R661	1-249-434-11	CARBON	27K 5% 1/4W
C697	1-124-499-11	ELECT	1MF 20% 50V	R662	1-249-428-11	CARBON	8.2K 5% 1/4W
				R663	1-246-529-00	CARBON	220K 5% 1/4W
				R664	1-246-529-00	CARBON	220K 5% 1/4W
				R665	1-249-424-11	CARBON	3.9K 5% 1/4W

**KV-27SXR10**  
**RM-755**

G

C

The components identified by shading and mark  are critical for safety.  
Replace only with part number specified.

Les composants identifies par une trame et une marque A sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

**D**

Les composants identifiés par une trame et une marque **▲** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **▲** are critical for safety.  
Replace only with part number specified.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*A-1345-757-A	D BOARD, COMPLETE			C1687	1-124-477-11	ELECT	47MF 20%
	*****			C1688	1-123-947-00	ELECT	10MF 20%
*4-341-752-01	EYELET			C1689	1-162-114-00	CERAMIC	0.0047MF 2KV
				C1690	1-108-425-00	MYLAR	0.022MF 200V
				C1691	1-124-901-61	ELECT	1000MF 20% 35V
		<u>CAPACITOR</u>		C1692▲	1-102-038-51	CERAMIC	0.001MF 500V
C1501	1-124-902-00	ELECT	0.47MF 20% 50V	C1693	1-124-480-11	ELECT	470MF 20% 25V
C1502	1-102-110-00	CERAMIC	220PF 10% 50V	C1694	1-102-212-00	CERAMIC	820PF 10% 500V
C1504	1-102-244-00	CERAMIC	220PF 10% 500V	C1695	1-123-024-00	ELECT	33MF 160V
C1505	1-108-429-51	MYLAR	0.047MF 200V	C1697	1-124-930-11	ELECT	33MF 100V
C1506▲	1-162-134-51	CERAMIC	470PF 10% 2KV	C1699	1-108-431-00	MYLAR	0.068MF 200V
C1507▲	1-136-617-11	FILM	0.019MF 3% 2KV	C1700	1-124-902-00	ELECT	0.47MF 20% 50V
*4-341-751-01	PAWL; C1507			C1701	1-123-875-11	ELECT	10MF 20% 50V
C1508	1-102-157-00	CERAMIC	560PF 10% 500V	C1703	1-123-875-11	ELECT	10MF 20% 50V
C1509▲	1-136-316-51	FILM	0.056MF 5% 630V	C1710	1-106-220-00	MYLAR	0.1MF 10% 100V
*4-341-751-01	PAWL; C1509			C1711	1-108-381-91	MYLAR	0.022MF 10% 100V
C1510	1-136-124-00	FILM	0.56MF 5% 400V	C1715	1-123-875-11	ELECT	10MF 20% 50V
*4-341-751-01	PAWL; C1510			C1716	1-108-381-91	MYLAR	0.022MF 10% 100V
C1511	1-102-038-00	CERAMIC	0.001MF 500V	C1717	1-124-925-11	ELECT	2.2MF 20% 50V
C1512	1-106-343-00	MYLAR	0.001MF 10% 100V	C1719	1-130-868-00	FILM	0.0056MF 5% 50V
C1513	1-123-943-00	ELECT	1MF 20% 250V	C1720	1-123-875-11	ELECT	10MF 20% 50V
C1514	1-136-612-11	FILM	2.4MF 5% 200V	C1721	1-123-875-11	ELECT	10MF 20% 50V
*4-341-751-01	PAWL; C1514			C1722	1-101-004-00	CERAMIC	0.01MF 50V
C1515	1-108-435-51	MYLAR	0.15MF 200V	C1723	1-124-120-11	ELECT	220MF 20% 16V
C1516	1-162-116-00	CERAMIC	680PF 10% 2KV	C1724	1-123-875-11	ELECT	10MF 20% 50V
C1517	1-108-413-00	MYLAR	0.0022MF 200V	C1725	1-102-820-00	CERAMIC	330PF 5% 50V
C1518	1-162-116-00	CERAMIC	680PF 10% 2KV	C1726	1-130-491-00	MYLAR	0.047MF 5% 50V
C1520	1-106-343-00	MYLAR	0.001MF 10% 100V	C1727	1-126-103-11	ELECT	470MF 20% 16V
C1521	1-106-383-00	MYLAR	0.047MF 10% 100V	C1729	1-136-173-00	FILM	0.47MF 5% 50V
C1524	1-106-343-00	MYLAR	0.001MF 10% 100V	C1731	1-108-634-81	MYLAR	0.047MF 10% 100V
C1539	1-124-925-11	ELECT	2.2MF 20% 50V	C1733	1-106-367-00	MYLAR	0.01MF 10% 100V
C1540	1-106-220-00	MYLAR	0.1MF 10% 100V	C1734	1-124-499-11	ELECT	1MF 20% 50V
C1541	1-102-030-00	CERAMIC	330PF 10% 500V	C1735	1-108-381-91	MYLAR	0.022MF 10% 100V
C1542	1-106-220-00	MYLAR	0.1MF 10% 100V	C1737	1-106-343-00	MYLAR	0.001MF 10% 100V
C1543	1-124-122-11	ELECT	100MF 20% 35V	C1738	1-106-383-00	MYLAR	0.047MF 10% 100V
C1545	1-108-373-91	MYLAR	0.0047MF 10% 100V	C1739	1-124-499-11	ELECT	1MF 20% 50V
C1547	1-123-875-11	ELECT	10MF 20% 50V	C1741	1-102-820-00	CERAMIC	330PF 5% 50V
C1548	1-124-913-11	ELECT	470MF 20% 50V	C1744	1-124-499-11	ELECT	1MF 20% 50V
C1549	1-102-114-00	CERAMIC	470PF 10% 50V	C1745	1-106-383-00	MYLAR	0.047MF 10% 100V
C1550	1-106-367-00	MYLAR	0.01MF 10% 200V	C1746	1-106-351-00	MYLAR	0.0022MF 10% 100V
C1551	1-102-233-00	CERAMIC	33PF 10% 500V			<u>CONNECTOR</u>	
C1552	1-124-925-11	ELECT	2.2MF 20% 50V	D1	*1-566-054-11	PIN, CONNECTOR 2P	
C1553	1-124-480-11	ELECT	470MF 20% 25V	D2	*1-566-063-11	PIN, CONNECTOR 11P	
C1561	1-124-925-11	ELECT	2.2MF 20% 50V	D3	*1-508-767-00	5P PLUG	
C1562	1-124-925-11	ELECT	2.2MF 20% 50V	D5	*1-508-766-00	4P PLUG (M)	
C1563	1-124-925-11	ELECT	2.2MF 20% 50V	D8	*1-508-767-00	5P PLUG	
C1564	1-124-927-11	ELECT	4.7MF 20% 50V	D9	*1-508-768-00	6P PLUG	
C1567	1-124-925-11	ELECT	2.2MF 20% 50V	D12	*1-566-057-11	PIN, CONNECTOR 5P	
C1568	1-106-367-00	MYLAR	0.01MF 10% 100V	DY1	*1-564-038-00	CONNECTOR PLUG, DY (MINI) 6P	
C1569	1-123-933-00	ELECT	10MF 20% 160V				
C1570	1-124-925-11	ELECT	2.2MF 20% 50V				
C1571	1-123-875-11	ELECT	10MF 20% 50V			<u>DIODE</u>	
C1572	1-124-925-11	ELECT	2.2MF 20% 50V	D1501	8-719-945-80	DIODE ERC06-15S	
C1573	1-124-925-11	ELECT	2.2MF 20% 50V		*4-341-752-01	EYELET; D1501	
C1574	1-124-901-61	ELECT	1000MF 20% 35V	D1502	8-719-945-80	DIODE ERC06-15S	
C1578	1-106-367-00	MYLAR	0.01MF 10% 100V		*4-341-752-01	EYELET; D1502	
C1630	1-124-463-00	ELECT	0.1MF 20% 50V	D1503	8-719-900-26	DIODE ERD29-08J	
C1631	1-124-658-11	ELECT	22MF 20% 50V	D1504	8-719-911-55	DIODE U05G	
C1662	1-129-710-00	FILM	0.0047MF 10% 630V	D1505	8-719-911-55	DIODE U05G	
C1663	1-106-383-00	MYLAR	0.047MF 10% 100V	D1506	8-719-110-72	DIODE RD30ES-B2	
C1670	1-124-908-11	ELECT	22MF 20% 25V	D1507	8-719-911-19	DIODE 1SS119	
C1671	1-124-925-11	ELECT	2.2MF 20% 50V	D1508	8-719-109-90	DIODE RD5.6ES-B3	
C1672	1-130-497-00	MYLAR	0.15MF 5% 50V	D1540	8-719-911-55	DIODE U05G	
C1673	1-124-925-11	ELECT	2.2MF 20% 50V				

D

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

Les composants identifiés par une trame et une marque  $\Delta$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

\* : Selected to yield optimum performance.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
D1541	8-719-109-90	DIODE RD5.6ES-B3		Q1610	8-729-178-54	TRANSISTOR 2SC2785	
D1542	8-719-911-19	DIODE 1SS119		Q1611	8-729-117-54	TRANSISTOR 2SA1175	
D1543	8-719-911-19	DIODE 1SS119		Q1612	8-729-178-54	TRANSISTOR 2SC2785	
D1544	8-719-911-55	DIODE U05G		Q1670	8-729-178-54	TRANSISTOR 2SC2785	
D1545	8-719-911-19	DIODE 1SS119		Q1671	8-729-178-54	TRANSISTOR 2SC2785	
D1552	8-719-911-19	DIODE 1SS119		Q1714	8-729-117-54	TRANSISTOR 2SA1175	
D1553	8-719-911-19	DIODE 1SS119					
D1560	8-719-110-66	DIODE RD27ES-B1					
D1561	8-719-911-19	DIODE 1SS119					
D1562	8-719-911-19	DIODE 1SS119					
D1563	8-719-911-19	DIODE 1SS119					
D1564	8-719-911-19	DIODE 1SS119					
D1662	8-719-901-19	DIODE V11N		R1502	1-249-423-11	CARBON 3.3K 5% .1/4W	
D1663	8-719-300-65	DIODE ES1F		R1503 $\Delta$	1-247-722-91	CARBON 5.6K 5% 1/4W F	
D1691	8-719-300-38	DIODE GU-3A		R1504 $\Delta$	1-215-918-51	METAL OXIDE 1.5K 5% 3W F	
D1692	8-719-921-53	DIODE RGP15G		R1505	1-216-346-00	METAL OXIDE 0.56 5% 1W F	
D1693	8-719-911-19	DIODE 1SS119		R1506	1-247-696-11	CARBON 47 5% 1/4W	
D1694	8-719-300-76	DIODE RH1A		R1507	1-215-868-00	METAL OXIDE 680 5% 1W F	
D1710	8-719-911-19	DIODE 1SS119		R1508 $\Delta$	1-216-425-91	METAL OXIDE 56 5% 1W F	
D1711	8-719-911-19	DIODE 1SS119		R1509 $\Delta$	1-216-450-91	METAL OXIDE 82 5% 2W F	
D1712	8-719-109-90	DIODE RD5.6ES-B3		R1510	1-216-449-11	METAL OXIDE 56 5% 2W F	
				R1511 $\Delta$	1-216-421-91	METAL OXIDE 12 5% 1W F	
				R1513	1-249-423-11	CARBON 3.3K 5% 1/4W	
				R1515	1-249-389-11	CARBON 4.7 5% 1/4W F	
				R1516	1-249-435-11	CARBON 33K 5% 1/4W	
				R1517	1-249-465-11	CARBON 47K 5% 1/4W	
				R1518	1-249-465-11	CARBON 47K 5% 1/4W	
				R1519	1-215-373-31	METAL 10 1% 1/6W	
IC1540	8-759-402-35	IC AN5521		R1521	1-215-493-00	CARBON 1M 5% 1/4W	
IC1560	8-759-106-61	IC UPC4570HA		R1524	1-215-493-00	CARBON 1M 5% 1/4W	
IC1691	8-759-178-12	IC UPC78L12		R1525	1-249-419-11	CARBON 1.5K 5% 1/4W	
IC1710	8-759-100-60	IC UPC1377C		R1527	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
				R1532	1-247-753-11	CARBON 1.2K 5% 1/2W	
				R1533	1-247-753-11	CARBON 1.2K 5% 1/2W	
L1502	1-407-364-00	COIL, SPOOK CHOKE 3.3UH		R1534	1-247-885-00	CARBON 180K 5% 1/4W	
L1503	1-407-365-00	COIL, CHOKE		R1535	1-249-427-11	CARBON 6.8K 5% 1/4W	
*4-341-751-01	PAWL; L1503			R1536	1-249-405-11	CARBON 100 5% 1/4W	
L1504	1-407-365-00	COIL, CHOKE		R1538	1-215-407-00	METAL 270 1% 1/6W	
L1505 $\Delta$	1-459-224-13	HLC		R1539	1-215-405-00	METAL 220 1% 1/6W	
*4-341-751-01	PAWL; L1505			R1540	1-216-429-00	METAL OXIDE 270 5% 1W F	
L1506	1-408-239-00	INDUCTOR 4.7MMH		R1541	1-247-722-11	CARBON 5.6K 5% 1/4W	
L1507	1-459-075-00	COIL, DYNAMIC CONVERSION CHOKE		R1542	1-216-433-00	METAL OXIDE 1.2K 5% 1W F	
L1508	1-459-104-00	COIL, DUST CORE		R1543	1-249-429-11	CARBON 10K 5% 1/4W	
L1509	1-459-313-00	COIL WITH CORE (HWC)		R1544	1-249-435-11	CARBON 33K 5% 1/4W	
L1691	1-408-225-00	INDUCTOR 3.3UH		R1545	1-249-427-11	CARBON 6.8K 5% 1/4W	
L1692	1-408-225-00	INDUCTOR 3.3UH		R1546	1-216-351-00	METAL OXIDE 1.5 5% 1W F	
L1693	1-408-225-00	INDUCTOR 3.3UH		R1547	1-249-429-11	CARBON 10K 5% 1/4W	
L1694	1-459-485-00	COIL, CHOKE		R1548	1-247-713-11	CARBON 1K 5% 1/4W	
				R1549	1-249-418-11	CARBON 1.2K 5% 1/4W	
				R1550	1-249-435-11	CARBON 33K 5% 1/4W	
				R1551	1-247-713-11	CARBON 1K 5% 1/4W	
NL1690	1-519-237-11	LAMP, NEON		R1552	1-249-409-11	CARBON 220 5% 1/4W	
				R1557	1-247-713-11	CARBON 1K 5% 1/4W	
				R1558	1-247-887-00	CARBON 220K 5% 1/4W	
PM1700	1-235-963-11	PROTECTOR MODULE (PM-9)		R1559	1-215-493-00	CARBON 1M 5% 1/4W	
				R1561	1-249-433-11	CARBON 22K 5% 1/4W	
				R1562	1-249-429-11	CARBON 10K 5% 1/4W	
				R1563	1-247-700-11	CARBON 100 5% 1/4W	
				R1564	1-249-441-11	CARBON 100K 5% 1/4W	
Q1501	8-729-168-82	TRANSISTOR 2SC2688		R1565	1-249-417-11	CARBON 1K 5% 1/4W	
Q1502 $\Delta$	8-729-304-50	TRANSISTOR 2SD1941-06		R1566	1-249-417-11	CARBON 1K 5% 1/4W	
*4-341-752-01	EYELET; Q1502			R1567	1-249-409-11	CARBON 220 5% 1/4W	
*4-378-214-01	HOLDER, TR; Q1502			R1568	1-249-441-11	CARBON 100K 5% 1/4W	
Q1540	8-729-178-54	TRANSISTOR 2SC2785		R1569	1-249-418-11	CARBON 1.2K 5% 1/4W	
Q1560	8-729-201-78	TRANSISTOR 2SD1406		R1570	1-249-431-11	CARBON 15K 5% 1/4W	
Q1561	8-729-178-54	TRANSISTOR 2SC2785		R1571	1-247-719-11	CARBON 3.3K 5% 1/4W	
Q1608	8-729-178-54	TRANSISTOR 2SC2785		R1572	1-247-717-11	CARBON 2.2K 5% 1/4W	
Q1609	8-729-178-54	TRANSISTOR 2SC2785					

**D****U2**

- The components identified by **☒** in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- \* : Selected to yield optimum performance.

Les composants identifiés par une trame et une marque **☒** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **△** are critical for safety.  
Replace only with part number specified.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark		
R1574	1-247-702-11	CARBON	150 5% 1/4W	R1733	1-249-467-11	CARBON	68K 5% 1/4W		
R1576	1-249-431-11	CARBON	15K 5% 1/4W	R1734	1-216-484-00	METAL OXIDE	3.9K 5% 3W F		
R1577	1-249-437-11	CARBON	47K 5% 1/4W	R1735	1-249-431-11	CARBON	15K 5% 1/4W		
R1578	1-249-436-11	CARBON	39K 5% 1/4W	R1736	1-249-438-11	CARBON	56K 5% 1/4W		
R1579	1-247-700-11	CARBON	100 5% 1/4W F	R1737	1-216-484-00	METAL OXIDE	3.9K 5% 3W F		
R1584	1-249-435-11	CARBON	33K 5% 1/4W	R1738	1-249-424-11	CARBON	3.9K 5% 1/4W		
R1586	1-249-427-11	CARBON	6.8K 5% 1/4W	R1739	1-249-418-11	CARBON	1.2K 5% 1/4W		
R1587	1-249-438-11	CARBON	56K 5% 1/4W	R1742	1-215-493-00	CARBON	1M 5% 1/4W		
R1588	1-249-435-11	CARBON	33K 5% 1/4W	R1744	1-249-409-11	CARBON	220 5% 1/4W		
R1589	1-249-424-11	CARBON	3.9K 5% 1/4W	R1746	1-247-717-11	CARBON	2.2K 5% 1/4W		
R1590	1-249-424-11	CARBON	3.9K 5% 1/4W	R1747	1-249-417-11	CARBON	1K 5% 1/4W		
R1591	1-249-441-11	CARBON	100K 5% 1/4W	R1755	1-247-706-11	CARBON	330 5% 1/4W		
R1592	1-249-441-11	CARBON	100K 5% 1/4W	R1756	1-249-436-11	CARBON	39K 5% 1/4W		
R1594	1-249-429-11	CARBON	10K 5% 1/4W	R1757	1-249-437-11	CARBON	47K 5% 1/4W		
R1595	1-249-429-11	CARBON	10K 5% 1/4W	R1760	1-249-418-11	CARBON	1.2K 5% 1/4W		
R1596	1-249-429-11	CARBON	10K 5% 1/4W	<b>VARIABLE RESISTOR</b>					
R1598	1-249-429-11	CARBON	10K 5% 1/4W	RV1540	1-230-624-51	RES, ADJ, CARBON 220			
R1599	1-249-429-11	CARBON	10K 5% 1/4W	RV1560	1-228-996-00	RES, ADJ, CARBON 47K			
R1602	1-249-426-11	CARBON	5.6K 5% 1/4W	RV1561	1-228-990-00	RES, ADJ, CARBON 1K			
R1636	1-249-437-11	CARBON	47K 5% 1/4W	RV1562	1-228-996-00	RES, ADJ, CARBON 47K			
R1637	1-249-437-11	CARBON	47K 5% 1/4W	RV1563	1-228-997-00	RES, ADJ, CARBON 100K			
R1638	1-249-413-11	CARBON	470 5% 1/4W	RV1564	1-228-997-00	RES, ADJ, CARBON 100K			
R1639	1-249-441-11	CARBON	100K 5% 1/4W	RV1710	1-228-993-00	RES, ADJ, METAL GLAZE 4.7K			
R1664	1-216-434-11	METAL OXIDE	1.8K 5% 1W F	RV1710	1-228-994-00	RES, ADJ, CARBON 10K			
R1670	1-247-701-11	CARBON	120 5% 1/4W	RV1711	1-228-994-00	RES, ADJ, CARBON 10K			
R1671	1-215-445-00	METAL	10K 1% 1/6W	<b>SWITCH</b>					
R1672	1-215-445-00	METAL	10K 1% 1/6W	S1540	1-554-186-00	SWITCH, LEVER			
R1674	1-249-423-11	CARBON	3.3K 5% 1/4W	<b>SPARK GAP</b>					
R1675	1-249-438-11	CARBON	56K 5% 1/4W	SG1501	1-519-422-11	GAP, SPARK			
R1676	1-247-726-11	CARBON	33K 5% 1/4W	<b>TRANSFORMER</b>					
R1677	1-249-423-11	CARBON	3.3K 5% 1/4W	T1501	1-437-079-00	TRANSFORMER, HORIZONTAL DRIVE			
R1678	1-249-429-11	CARBON	10K 5% 1/4W	T1502	1-421-794-11	TRANSFORMER, FERRITE (PMT)			
R1679	1-215-489-00	CARBON	680K 5% 1/4W	*4-341-751-01	T1502	PAWL; T1502			
R1691	1-249-448-91	CARBON	1.2 5% 1/4W F	*****					
R1692	1-249-448-11	CARBON	1.2 5% 1/4W F	*1-624-448-11 U2 BOARD					
R1693	1-249-462-11	CARBON	22K 5% 1/4W	*****					
R1694	1-249-462-11	CARBON	22K 5% 1/4W	*****					
R1695	1-215-906-11	METAL OXIDE	15 5% 3W F	*****					
R1700	1-202-830-00	SOLID	10K 10% 1/2W	*****					
R1702	1-249-413-11	CARBON	470 5% 1/4W F	*****					
R1703	1-249-411-11	CARBON	330 5% 1/4W	*****					
*R1704	1-247-891-00	CARBON	330K 5% 1/4W	*****					
R1705	1-249-419-11	CARBON	1.5K 5% 1/4W F	*****					
■R1707	1-249-433-11	METAL	1/6W	*****					
R1709	1-249-433-11	CARBON	22K 5% 1/4W	*****					
R1711	1-249-462-11	CARBON	22K 5% 1/4W	<b>CAPACITOR</b>					
R1712	1-249-468-11	CARBON	82K 5% 1/4W	C471	1-123-875-11	ELECT	10MF	20%	50V
R1713	1-215-920-11	METAL OXIDE	3.3K 5% 3W F	C472	1-123-356-00	ELECT	10MF	20%	16V
R1714	1-249-433-11	CARBON	22K 5% 1/4W	<b>TRANSISTOR</b>					
R1716	1-215-920-11	METAL OXIDE	3.3K 5% 3W F	Q471	8-729-117-54	TRANSISTOR 2SA1175			
R1717	1-249-429-11	CARBON	10K 5% 1/4W	Q472	8-729-117-54	TRANSISTOR 2SA1175			
R1718	1-249-422-11	CARBON	2.7K 5% 1/4W	Q473	8-729-117-54	TRANSISTOR 2SA1175			
R1719	1-249-440-11	CARBON	82K 5% 1/4W	Q474	8-729-178-54	TRANSISTOR 2SC2785			
R1720	1-247-700-11	CARBON	100 5% 1/4W	<b>RESISTOR</b>					
R1721	1-249-417-11	CARBON	1K 5% 1/4W	R471	1-247-887-00	CARBON	220K 5% 1/4W		
R1722	1-215-458-00	METAL	36K 1% 1/6W	R472	1-247-887-00	CARBON	220K 5% 1/4W		
R1723	1-247-719-11	CARBON	3.3K 5% 1/4W	R473	1-249-433-11	CARBON	22K 5% 1/4W		
R1724	1-249-459-11	CARBON	12K 5% 1/4W	R474	1-249-433-11	CARBON	22K 5% 1/4W		
R1725	1-249-435-11	CARBON	33K 5% 1/4W	R476	1-249-437-11	CARBON	47K 5% 1/4W		
R1726	1-247-700-11	CARBON	100 5% 1/4W	R477	1-249-437-11	CARBON	47K 5% 1/4W		
R1727	1-247-706-11	CARBON	330 5% 1/4W						
R1728	1-214-766-00	METAL	36K 1% 1/4W						
R1729	1-247-725-11	CARBON	10K 5% 1/4W						
R1730	1-247-715-11	CARBON	1.5K 5% 1/4W						
R1732	1-215-463-00	METAL	56K 1% 1/6W						

U2

U1

**U1**

Les composants identifiés par une trame et une marque **A** sont critiques pour la sécurité.  
Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark **A** are critical for safety.  
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
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**CONNECTOR**

U1	*1-566-044-11	PIN, CONNECTOR 5P
U2	*1-566-043-11	PIN, CONNECTOR 4P
U3	*1-566-043-11	PIN, CONNECTOR 4P
U4	*1-566-047-11	PIN, CONNECTOR 8P
U5	*1-566-044-11	PIN, CONNECTOR 5P
U6	*1-566-044-11	PIN, CONNECTOR 5P

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**MISCELLANEOUS**  
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A <sub>x</sub> 1-230-940-21	RESISTOR ASSY, HIGH-VOLTAGE
A <sub>x</sub> 1-417-125-16	SELECTOR, ANTENNA
A <sub>x</sub> 1-426-350-21	COIL, DEMAGNETIZATION
A <sub>x</sub> 1-451-275-11	DEFLECTION YOKE (SY-158)
1-452-032-00	MAGNET, DISK; 10MM Ø

1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø
*1-558-745-11	CABLE, P-P
A <sub>x</sub> 1-559-396-11	CORD, POWER

SP901	1-503-914-11	SPEAKER
SP902	1-503-914-11	SPEAKER
S903	1-529-062-11	BUZZER
S904	1-529-062-11	BUZZER
T1701A <sub>x</sub> 1-439-416-31	TRANSFORMER ASSY, FLYBACK	
TU101A <sub>x</sub> 1-463-771-11	TUNER, ET (BTP-201A)	
V901 A <sub>x</sub> 8-737-753-05	PICTURE TUBE (A68JMT50X)	

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**ACCESSORIES AND PACKING MATERIALS**  
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Part No.	Description	Remark
A-1470-821-A	COMMANDER ASSY (RM-755)	
1-417-131-11	CONVERTER (CND ONLY)	
A <sub>x</sub> 1-417-135-11	MIXER, U/V (USA ONLY)	
*4-388-386-01	CUSHION (UPPER) (ASSY)	
*4-388-387-01	CUSHION (LOWER) (ASSY)	
*4-388-388-01	INDIVIDUAL CARTON	
4-482-553-21	MANUAL, INSTRUCTION	
4-482-553-31	MANUAL, INSTRUCTION (CND ONLY)	

9-963-994-01

**Sony Corporation**  
TV Group

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